

ENGINEERING HERITAGE WESTERN AUSTRALIA

WESTERN AUSTRALIAN ENGINEERING ORAL HISTORY PROGRAM

Transcript of Interview with

Dr KEN MICHAEL AC

Interviewer	Doug Ayre History Development Pty Ltd PO Box 126 North Beach, WA 6920
Transcriber	Mary Macfarlan
Initial Interview	29 January 2013
Duration	3 hours 43 minutes

NOTES TO THE READER ON INTERPRETATION OF THIS TRANSCRIPT

Readers of this oral history transcript need to be aware that it is a near verbatim transcript of the words as spoken during the interview that was conducted in the form of a natural conversation between the interviewer and the person being interviewed. Some minor changes have been made to facilitate the flow of the document.

Much of what is said in such interviews relies upon the accuracy of the memory of the person being interviewed and readers should bear this in mind and judge for themselves how factually accurate the material is. The interviewer has sought to clarify or verify facts and statements made during the interview where this seemed appropriate.

The views and opinions expressed within the transcript are those of the person expressing them in the interview.

Please refer to the notes on the following page to aid interpretation of the transcript.

Note 1

The recording comprises eight parts in 'wav.' format. It runs for a total of 3 hours and 43 minutes.

Note 2

Where the interviewer has used words such as 'Yes', 'Right' or 'OK' as an encouragement, or may have used an habitual phrase, but not as anything else then these words have not been transcribed unless they are relevant for the context.

Note 3

The interviewer has inserted occasional words (which are not in the original recording) into the transcript in order to clarify the context of what was being said. These words are shown in the form [they would say].

Note 4

Where a sentence has a series of dots in the text such as this indicates that the speaker paused, the recording was not clear enough to transcribe accurately what was said, there was pause, or the following speaker interrupted what was being said.

Note 5

Numbered footnotes have been provided in the text in order to assist the reader.

Note 6

The interviewer is referred to as 'Ayre' in the transcript and to the subject speaker is referred to as 'Michael'.

1/00 Ayre This is an interview with Dr Ken Michael who will be speaking with Doug Ayre who is working as volunteer with the Engineering Heritage Western Australia National Oral History Program. This interview will form part of an oral history archive which will be housed at Engineers Australia in West Perth and Canberra. Copies may also be lodged at the Battye Library.

Before we begin I need to make sure you understand your rights in relation to this interview. Do you understand that you will control access to the information given during this interview by filling in the consent form?

Michael Yes.

Ayre Do we have your permission to make a transcript of this recording?

Michael Yes.

Ayre Thank you. Now I remind you that you may terminate this interview at any stage.

Michael Thank you.

Ayre This interview is taking place on the 29th of January 2013 at South Perth. Dr Michael may I call you Ken please?

Michael Ken please. Yes.

Ayre Thank you. Right. Well probably the place to start is where you started with your childhood and family background. Would you like to tell me a little about that please?

Michael Yes. I'd be very happy to. Well I was born in 1938. My parents were Greek migrants and my father came out at a very early age in 1895, in fact as a 12 year old. He later became a naturalised British subject and went and worked in the goldfields area of Cue until the breakout of the war when he volunteered to join the Australian Imperial Forces. And he then eventually got there after a few situations with health in his case which delayed him, but eventually was taken to France where he [fought] on the Western Front. He, you

know, defended his newly found country - newly adopted country. And he was gassed along with many others in that time and he came out as a totally and permanently incapacitated member. But he managed to marry twice and have five children from the first marriage and three children from the second marriage which was in my case. And because of his war wounds my brother and sister and myself who were under 16 - I was only eight at the time when he died - were looked after by Legacy and the Department of Repatriation who really made it all possible for us to have an education so I remain very indebted to them.

So that was the beginning so, you know, coming over as Greek migrants [with] my mother widowed at any early age, [There were] some years between the two of them, and she was only 34 when she was widowed and had her step children and her own children. But you know [she] was a very dedicated mother and looked after us very, very well.

And I guess that was the hard times myself, and many, many others in similar situations and in our own local community suffered at that time because it was a difficult period, leading in to the Second World War. But then I, along with many others within the Greek community and Italian community and in fact the Jewish community at the time, I went to Highgate Primary School and that was the beginning of my education. And from Highgate Primary School I went to what was called Perth Boys [High] School which is in James Street where in fact the PICA - the Perth Institute of Contemporary Arts - is based opposite the library in James Street, Northbridge.

And after that after three years there I went to Perth Modern School and completed my final two years of high school there and following that went to UWA where I studied engineering. In those days [it was] a five year course and I chose civil engineering because there was something attractive about being able to see what you had done in the finished state and infrastructure of course was very prominent

at that time. I was inspired during the course by the person who was to become my boss, and also my lecturer at the time. The boss was Gilbert Marsh and Gilbert, of course, is a very prominent engineer and remains not only a good friend but he was a very close mentor of mine. And lecturer George Hondros a structural engineer, who unfortunately died young, encouraged me to join Gilbert for these discussions. Interesting, because he came down to the university and talked about bridges in our final year and that was sufficient to cause me to want to do bridges. So I was really inspired by his talk and I loved structures anyway still do I must say [bridges are] still my [passion]. You know, everybody who travels with me anywhere around has to go through a tour of the structures that I see and my wife will tell you that she's heard that many times and I've told her she will hear it again. And that's the love I have for the subject and the work.

Ayre Yes.

Michael And the thing that engineers can do is the thing that impressed me. They can actually make a contribution and this argument about narrowness of their perspective is for me such a nonsense. They provide facilities for the community to be able to engage with each other, in industry and in any other aspect that they may want to be involved in.

So that's where the real start came and George Hondros was a great lecturer and the beauty is I later had the privilege of giving the George Hondros Memorial Lecture within my capacity as Governor but it was still a privilege to be able to speak about someone who I knew so well and who looked after my interest so well. And so I also had another person who was a prominent person at uni for me. [He] was Graham Glick, and Graham often I see him and when he's in the audience I give him credit for teaching me to think, for teaching me to use fundamentals, for teaching me to explore the causes of the problem, and looking at the very definition of what we were trying to

achieve and why, and articulating the assumptions that you might need to make or the foundation for that problem. So he did give me that very analytical approach but also very creative.

And I was doing for my Honours thesis I was doing a folded-plate analysis and made little folded-plate models and eventually not long ago he actually [gave me a copy] - I had a copy of it but the uni library were getting rid of various things, naturally, and the original copy was returned to me. So I was very happy.

So after I finished my degree and graduated, and I was fortunate to get First Class Honours in civil engineering, I went, with encouragement of George Hondros particularly and the accommodating aspects of one Gilbert Marsh, I ended up in Main Roads designing bridges. And that's where my career began.

And so and in fact the beauty was that the offices in those days were in the old Barracks buildings with the Public Works and so I used to have one of those, or shared an office, in that building which was later of course to be demolished for the Mitchell Freeway.

Michael After a year of working with Gilbert and others I spent the first year doing what every graduate does, I think, get all the jobs that others perhaps don't like doing. And but I learnt a lot from it because I was testing bridges, I was controlling heavy road load routes, I was strain gauging and measuring stresses, and whatever it was in bridges as they were. I studied the distribution of loading in bridges [and] all the very fundamentals you need to be able to design. So I learnt a lot in that one year.

And then I was seconded to De Leuw Cather, the American engineers, who were brought out to design the freeway north. At that stage the freeway south that's crossing the Narrows Bridge, and also the extension to it I think it went to Canning Highway initially, that section had already [been] built and that came through. But I've always had a high regard for the Stephenson plan. Gordon Stephenson and Alistair Hepburn did the regional plan for Perth in

'55 and one of the recommendations was building a bridge across the Narrows. And that was completed in 1959. So and then, of course, there's also all aspects of that related to access to the river being affected and so on. But that's another story which I did address in later years when I had the opportunity, not so much as in an engineering capacity but in other capacities where I was giving particular lectures which may well come out later in the interview.

So the section we were talking about was in front of Parliament House and that was the beginning of the Mitchell Freeway and it was called the western switch road by the Americans typical American word I think which switching it away from the centre and heading north.

Michael And my first bridge then, first design, that I had a chance to do, and we did it in teams, was the Malcolm Street bridge and I was able to design, and had the great privilege of designing, the deck of that bridge. That was in the sixties and then they all felt that I should be doing something else so they sent me to reinitiate the day labour gangs that were put off for a while. And I just [constructed] a couple of small bridges. We had a few issues with those but that was just to give me a bit of experience because I was deciding to go and extend my studies from post-graduate point of view and I was exploring and looking around where I might go.

So I graduated in, or I started work in January 1961, so I graduated that year as well finishing exams in December 1960 and when it was getting closer, you know, to a few years later I was exploring and working on other bridges and other sections. I was exploring ways to continue my studies and [to] Gilbert Marsh again I said 'I'll go east and do some post graduate work', and he encouraged me to hang off doing that and look to go to Imperial College in London. And he told me why. He'd just spent a few months there and he and I were working on you know a solution of 8th order partial differential equations, if you want to say them, analysing box-girder bridges - T-

beam bridges, then box girder bridges - using what he had learnt himself at Imperial College. So he encouraged me just to not rush in to it.

So I eventually applied for a scholarship to go to London [on] the Commonwealth Scholarship and Fellowship plan controlled by and managed by the British Council and I accepted that. I was also awarded a Hackett Studentship at the time and I was disappointed, because of my links to UWA, it was one I was attracted to and unfortunately it only allowed me up to two years. This one was initially - the British one - was one year but an extension up to the three years so I was taking a risk. But I chose the British Council one because I had a chance with Gilbert's recommendation to plan for a three year stay and I said 'I don't think I'll stay that long'. He said 'but plan for it'. Well he was right because you couldn't get me away in the end. So there you are.

But the way we did it, because I met Julie my now wife after my second year engineering exams in 1957, December '57, and so she and I have been together ever since. And but we said let's get married and we'll go over to London and spend our first years there. And that's what we did.

Ayre That was a big adventure wasn't it?

Michael Oh it was a big adventure especially when you had absolutely no money.

Ayre Well you're not supposed to [have].

Michael If I did a business plan and looked at all the objectives I probably wouldn't have gone because the money we relied on was the wedding present money and that we just [kept] telling people 'don't give us presents, don't give us gifts, give us money'. And with that we were able to get on a ship. And I had to pay for Julie of course because we weren't married at the time of the award of the scholarship, which was March of that year, March 1964, and we were over there in

August '64, and we got married in July. The scholarship people wouldn't allow an allowance for your wife. You had to be married at the time. So we missed out.

So we went across on the ship, made friends, found it very strange to move into London, but eventually we found a flat in Wimbledon. And away we went and had a great three years and still have some friends which we enjoy.

Julie was a dental nurse so she ended up working at Guys Hospital in the dental school. She was the assistant to the professor there and it was a professor of orthodontics at the time.

The irony of it all is our daughter is married to an orthodontist so, you know, it all came back to us. And he knew, although he wouldn't have known that lecturer, from papers he'd read he knew that particular professor [and] of his work, early work, as well. So it was a familiar. Sort of a bit of coincidence that it all came together.

Ayre Sounds like it was a positive experience for both of you?

Michael It was a very positive experience. The biggest thing was we were independent.

Ayre Yes.

Michael And I think, you know, we were 26, each 26, and we managed to travel around and we saw a bit of Europe and the Main Roads sent me to a congress was it. I think certainly it was [the Federation International Prestressed Concrete Association]. [They] held a four yearly congress in Paris and we were over there and thoroughly enjoyed it. I guess it was convenient because I was there. I doubt if I'd been the selection if I was in Perth at that time but I was allowed to be selected for that and that was Gilbert again guiding me.

And towards the end when we were running out of time, and the scholarship was running out, Main Roads had already given me support in addition to the scholarship. If you got a scholarship they had this program of providing you some support which made a big

difference. That was the beauty of Main Roads. They encouraged people to train. They sponsored people to train. They had scholarships to America.

I was the first to go to London. I preferred to do that because I wanted to go to that particular college: Imperial College. And so we were looked after and when my scholarship was running out they increased the support they gave to me to allow me to finish my work. So when you've got support like that your loyalty goes up ten-fold.

And so we came back. When I came back I got a letter from Imperial College offering me a lectureship there. Probably had to pay my own way back and I said no. That didn't take long to make that decision. I had a commitment to Main Road which I was [intending to keep].

Ayre Still it was a nice compliment wasn't it?

Michael I was very touched by it. Very touched.

The PhD work I did was the analysis of shallow shells and they were the 8th order partial differential equations Gilbert encouraged me to learn before I went away and I wrote and [developed] the work that I did in those early days, including the analysis of those very strong box girder bridges, was on the IBM Bendix G15 D which could only solve 28 equations, simultaneous equations.

Ayre You'll be telling me you used punch paper tape next.

Michael I did. And I used punch paper tape and I used to go - I used to play cricket on Saturdays for a team - and in the mornings I'd go in to Main Roads, because you'd operate it yourself in those days.

The beautiful thing was that the matrices that I was solving had a tri-diagonal form so there were lots of zeros in it because of the linear connection of the members. So what I did was developed a system of punching out the tapes to get the information then reading them back in and overlaying them and when overlaying them adding them to the elements. So I went backwards and forwards until I got the tri-diagonal matrix that I wanted. I could only go 28 by 28. And then I

solved it which took two and a half hours to solve that one.

And that was only one harmonic of a series of harmonics of the series that I was solving. So it was a clearly analytical system of the traditional [type], not finite element which was starting to come in when I was in London.

Ayre So you were using the traditional analysis that would have been used using a slide rule. But it was all using digital machinery?

Michael Oh yes that's exactly right. I was solving those problems but I was using the theory of elasticity, which is what I enjoyed and developed the equations. And I still have the hand written folders where I developed those equations.

And when I came back I was a lot more equipped, you know, with the information and could carry on that work which we did with Gilbert. And before going away we did a paper together and I'm happy to say that it was Gilbert Marsh ,George Hondros, and I was the junior author and I really didn't have very much to do with the writing but I did all the development and calculations.

Ayre Well you got your name on the paper didn't you?

Michael I got my name on the paper and that was again Gilbert and George supporting me in doing that. It makes a difference those little small, little things you look back on as being key points, key turning points, in what you were doing and encouraging you to do other things.

While we were in London Julie and I had a great time and we did lots of things together. We used to go to the theatres and British Council had a wonderful cultural program and tourist program, I guess, but culture was the one we loved. We used to go to concerts and go on tours and day tours. We didn't have a car initially so for 18 months it was on the underground. We were not far from the underground at Wimbledon and so we had a little maisonette as they call them. So we managed [and] eventually bought a little mini-van like all good Australians and then went to that congress, or conference whatever it

was, of the Prestress Concrete Association international group and took our little mini-van there. And then went to other places after that and made a bit of a tour of it. So you know we were able to do these [things].

Ayre Well this is what young people should do Ken.

Michael Yes, I reckon. So when people talk about travel, you know we're talking about we were home when we were 29 so we were there from 26 to 29.

Ayre What a great experience.

Michael It was a beautiful one and Julie had never been away from home, you know, and I hadn't, I'd never, travelled overseas and neither had Julie. Julie had been on a boat from Sydney.

Ayre Well of course travelling wasn't quite as easy as it is today was it?

Michael No, and you know people said there were no long distance planes or if there were they were very expensive. We went by sea and we gladly did because we [spent] three weeks [getting] there and we got to know a lot of people and we continued that friendship in London with some of them that we did get close to.

And then it was interesting on the way back. Julie planned our trip on the way back and we went from went to New York to Washington then went straight across to Los Angeles and San Francisco and Hawaii and then we went to Japan and Thailand and I think we went to Manilla after that. And then we came home, well Singapore and then came home.

So it was a great trip. The only thing that went wrong was that in November of that year, I think it was November, before we were going that would have been November 1967, or that year anyway, that the pound was devalued by 14% and all our money was in pounds so we were suffering. I had some money coming in so I went and saw the bank manager and said 'look, I want to draw out money I haven't got' and, do you know, that was the ANZ in London in The Strand,

and he knew, because he could see from the records, that money was coming in on a regular basis from support I was getting through Main Roads particularly and that hadn't come through. And I said 'look, if it was here I'd be right' and they said 'no, don't worry. Take it and go'.

So there you are. When you get all those little things happening to you [and] the Gilbert Marshes, the George Hondroses, the bank managers, and people we met in London who looked after us, you start to appreciate the value of supporting others. And I was impressed with that from a very, very early age. And it just makes a difference for an opportunity that you do have.

Ayre It creates a frame of reference for you, doesn't it, to see life?

Michael It does, and see life, you know, as it is and remembering that while you might have gone through various situations in the early days and continued there were people equally doing the same if not worse. And that sort of compassionate side just got impressed upon me because people were doing it to me and I wanted to be able to help out. So when I came back whenever there were students who wanted to be shown things or go through things I would always provide that support.

Ayre Yes. I think summarising what you've just been saying and looking at my own experience in life there's two things leap out at me. One was you appreciate the fundamental decency of people.

Michael Yes.

Ayre And two you, in retrospect, appreciate your willingness to do any job to learn.

Michael Yes.

Ayre Is that true?

Michael You've said it so beautifully I couldn't have said it any better [myself] over the long interview. But it's exactly right. I never

objected to the task I was given.

One of the ones that nobody ever wanted to do were the heavy haulage jobs. And that is checking bridges analysing them and putting in place monitoring systems to make sure you know [the limits]. For example one of my first jobs, before going to London was we had to put this heavy vehicle [over a bridge] and I said to the people 'that'll be fine but it must move down the centre and at no more than 10 [kilometres per hour]' because of vibration and dynamic loads of course. But the middle [of the road] was important because we've got to spread it as much as we can. We used to send people up there to stop them at the entrance, mark where they had to go, and then take them across. That way you were using an existing facility in a careful way and obviously in a sensitive way.

But I learnt a lot from that. I learnt a lot about distribution of loads. I learnt about how the variation in loading capacities [works]. I learnt about materials and their behaviour. I learnt about how to monitor.

I learnt how to do test loads. I used to do test loads on some because I wasn't sure. We just gradually increased the load and I'd measure so that it wasn't being just arbitrarily done. And then I'd allow things to go across. And when you think about it that's a great way of getting an insight into behaviour of structures in my case.

Ayre I had a person say to me quite a few years ago 'why are engineers so conservative/' and I said 'the next time you drive over the Sydney Harbour Bridge think about what you've said.'

Michael It was built a long time ago and with materials that weren't as good as the materials are today but kept within the framework of the behaviour of those materials just as those wrought iron bridges Brunel and everyone else [built].

Ayre Aren't they marvellous?

Michael Marvellous. Very brittle materials yet they understood them. I must say one of the most interesting lectures I attended when I was doing

my PhD over there, the first year, was a course work with Imperial College. And that was really what I wanted to do, that particular course work, it was a great insight into structural engineering. I had two or three of the best lecturers you could possibly have.

But what I wanted to - unfortunately I don't think they're any longer with us I know at least one has passed on - when I went in to my research work I decided to revisit some of the lectures I went to because I was working with that lecturer as my supervisor. So I just wanted to hear the last few lectures again. And I remembered them. The thing that impressed me, and I didn't appreciate it when I was going through at the time, was the way he reinforced the points of view through the lecture.

You know? He wouldn't just say it once he'd say the point more than once. When I remembered going through it I can only remember it probably once but, because I knew it now, I was hearing it all the time. And it was his way. It's something I've learnt that when you are teaching, when you have the opportunity - and you don't want to repeat yourself - but if you have an opportunity to reinforce a fundamental issue that is considered to be important then do so.

He did that because I could walk away from his lectures feeling quite good about them. So I always feel that I learnt that from him. He was quite a remarkable person so I had a great course there.

Ayre Good. Now I'd like to stop there.

2/00 Michael Yes, so we continue on and certainly had the great pleasure of coming back and being put into bridges again. This time I worked on the Narrows Interchange because I joined the team as a younger engineer. I remember being told I'm now a Class II Engineer in those days of classes and Class V was really managerial level to give you an idea. So I'd got a little way to go.

Ayre Yes, I remember it well.

Michael Anyway I came back and I must say I was loyal to Main Roads. I

wanted to work for them but I was also interested in lecturing and I wanted to. I went and saw UWA and WAIT¹ to see if any opportunities come up as I work [also], you know. Will there be any opportunities and there weren't any. Anyway there was one comment made, not from UWA, from another group [that] told me I was over-qualified. So that was interesting with a PhD. That was an interesting point of view.

That was unfortunately the way it was. Situations were but not [available at] UWA. UWA certainly just didn't have the capacity. I was just looking for a year or two ahead [what] would there be because I had a bond² that I had to observe. But it caused me, when I couldn't get through that area, it gave me a wonderful opportunity to sit back and reflect [and ask myself] 'Well, what [do] I really want to do?' And it came very clear to me that I wanted to do consulting and I had the opportunity to do that, to join a particular group. And I chose not to. I suppose Julie preferred what I was doing. She liked, I guess, the fact that I was doing what I enjoyed and the other was the unknown. The unknown is sometimes something you can [fear but] it creates opportunities and I certainly highlight that to many others.

But anyway I felt, you know, I really felt something about making a contribution to the community and the thing that struck me was that Main Roads were really at the centre of conceptualising what needs to be done [but it] doesn't matter how it gets delivered in the end. I was really still at the delivery end but I was saying 'well, we have a say in what's going to happen here. That makes a difference'.

So I liked that idea. I liked that idea of being with groups of people that were changing the face of Perth if you like. I'm still proud of that to this very day when I look at some of the infrastructure. I certainly wasn't involved in the planning of some of those earlier ones [but] I was certainly the person who was on the design team and thoroughly

¹ The Western Australian Institute of Technology which became Curtin University.

² A bond that required him to work with his employer for a specified time.

enjoyed it.

So when I came back they were well advanced on the Narrows Interchange. And in fact the people in London I went [to study under], I think I was going to say, the story I was thinking of. When I went back there I went, if I can just recall my time in London when I was doing my research, I took the opportunity also to attend a number of other lectures. I went and attended some aeronautical lectures, structural ones, because I knew the names very, very well. I attended some humanities lectures because they used to have a special speaker each week. People like Taylor [the historian], people like the Archbishop of Canterbury at the time, and one in particular; I went there with all these [other people so] I'd go early and get a front seat and I did this with this one too. I happened to hear Barnes Wallis of the Dam Buster fame.

Ayre The Wellington Bomber?

Michael The Wellington Bomber. He was sitting here, you know. He would have been only a matter of six feet away from me and I was listening to him and he was telling the story. I don't want to quote him wrongly but he was telling the story of how he had this concept of a swing wing aircraft and how he went to the British people, the government, to try and encourage them to build it and didn't get their support. So he went to America who were interested, but in the end said no. Then they, of course, went on and [developed] what was F..?

Ayre The F1-11?

Michael The F1-11 they developed. Which of course we [used]. He said 'but they got it wrong didn't they', or something like that, 'but they learned'. But to be in that environment is inspiring.

Ayre Yes. They're stimulating people aren't they?

Michael Oh aren't they? Absolutely.

One of the other people I met there was a soils person, you know in the civil engineering, soil mechanics, soils engineering, and he knew

about the work we were doing on the Narrows Interchange probably through connections of Gilbert Marsh. Gilbert had a very.... although he was a terrific [engineer] and he was a terrific bridge mind he was [also] very much into foundations and the behaviour of soils. His concept was to consolidate the mud as we called it down on the Narrows Interchange by driving vertical sand drains in at six foot intervals I remember.

Ayre What's a vertical sand drain?

Michael Well what it was, this material that was sitting under our [site] - you know, because we did fill the river and that's another story again - that consisted of a very high [density material]. It wasn't impermeable but [had] very low permeability so if you put a surcharge loading on top to consolidate it [then] it would take forever.

Ayre When you say consolidate you're talking about compressing?

Michael Squashing it.

Ayre Squashing it?

Michael Squashing it so that it released the water. There were no drainage paths. They were too far apart. So it took a long time hence I can give you examples of where that still is evident today probably. But this is the late sixties, early seventies. What they did, and they started this before I went away because I think I got involved in [it] - or when I came back - I might have done some slip circle analysis. What it was is on a six foot grid basis they drove in a flat ended circular pile and then filled it with sand [and] released the foot or either drove an open [pipe] I think it was, that then they filled with sand and pulled out the metal [casing]. So they ended up with these vertical drains in the mud providing shorter drainage [paths].

Ayre So these were effectively cylinders without any walls but full of sand?

Michael Full of sand so that the water had a shorter distance to travel. The

depth of the mud, if I can talk in feet, that I can remember was about 60 feet and I think they the primary consolidation was something like 26 feet and there still remained two or three feet secondary consolidations which was catered for in the bridge design in another way.

Then, having done all that, the one difficulty that existed, because it wasn't a uniform depth of mud [and] there was a horizontal movement that went with it, and so you had to protect the foundations from this lateral movement which would have damaged the foundations.

So all the foundations down on that Narrows Interchange are sleeved so the main holding [foundations] whether it's a four foot solid columns that you see there going down to the calcareous shale, say rock, within a seven foot sleeve that was cleaned out that can move around. Or huge caissons of 30 foot diameter, one three feet thick with the capacity of joints we'd built within it, and that's another story, that allowed it to slide. Within that annulus a 20 foot diameter cylinder was built down in to the rock so the whole thing was moving.

I remember putting in [gauges]. I was responsible for monitoring the movement of the caissons during the construction, and that in itself was an interesting story, and you even put in special gauges in order to measure what they [the movements] would be. And somewhere there's a paper by Gilbert Marsh on it. It was Gilbert's concept I was purely the person doing the work.

Ayre What were the caissons made of?

Michael Concrete.

Ayre Concrete?

Michael They were made in 10 foot sections and between each 10 foot section there were bearings - there were sliding Teflon units - but they were locked during the sinking and then when they were unlocked they

were actually stressed fully through so they stayed together. But they actually could slide individually so that if any movement took place, through the mud impinging on it, it moved this huge cylinder. I'd say in their final position they weighed something like 2000 tons so we're not talking about small things.

A couple of them got off outside the limits because you had to get them within a 75 mil tolerance and again, another person I was working with [was] Peter Samuel, a very clever engineer who was unfortunately killed in a car accident, from the UK who, also I think he'd been to Imperial College as well, but he devised a way of controlling the movement.

You know how when you cut a tree and you have wire ropes around it and as you cut it you can adjust it? That philosophy [was used] but in a way that we wrapped big cables around the cylinders, the caissons, connected to a steel lever, which could put kentledge on the back, and apply a force so we would just adjust the forces by adjusting the kentledge to keep them within that tolerance because they tended to wander off some of them [because] it was too soft. Not all of them [but] just these particular ones.

It worked pretty well and they're still there although they've knocked some of them out because some of those were on the bridge that was taken apart at the bottom of William Street. That was where the material was very soft because I don't think it was appreciated that it actually extended as far as it did.

Michael So we were doing those sorts of studies and eventually the bridges which I worked on particularly the one down at the bottom of William Street, that was knocked down, that was one of the ones I worked on as well as part of the team. So that whole interchange I got involved with, and the consolidation took place, and a chap in Imperial College in London turned around and said if this was to happen in the UK they'd form a committee and [it would] never take place. Whether I should say that I don't know but it's what I recall.

But Gilbert had the conviction of it. It was an expensive process as we know but now we've got the same thing so while the bridges, the foundations, were on solid material the approaches were on flexible material.

So there was a worry about the approaches and in fact they were designed as a bridge but they were designed to rotate. And inside on each abutment if you [were to] go inside you would see where there were jacking facilities and after when it went down say half a six inches, eight inches, it would be jacked up and the approaches would be filled with asphalt.

Ayre I've actually seen those and wondered.

Michael Have you?

Michael Yes, so that's how it was done.

Ayre So it's adjustable?

Michael It's adjustable. Now whether, I don't think, the movement that took place was as great as was anticipated. I'm not sure. I know it's there and the history [of that] came from the Narrows Bridge because the Narrows Bridge, I believe, had piles which were within cylinders because [of] the movements on the northern abutment.

So they're the works that I started to do and eventually I was put in to a position in design engineer special projects which allowed me to design the first Burswood Bridge which was never built. It actually went through the golf course and through Constitution Street and then it was moved further north. I was involved in that as well. This was in the early seventies and while we finished the bridge and even drew it up in imperial [converted into] in metric units I remember they were all odd units because we'd chosen feet as the rounding figures. That particular bridge was put off because of cost.

It's important to know that that was in the early seventies and it was some 20 odd years later that the final line was put in place in a different location close to the railway bridge. It was interesting

because had it gone in that bridge would have connected to a one-way pair system in Newcastle Street and Aberdeen Street which we were all happy with at the time. But if you look at it today it would have created a division within that community because you'd have had, certainly, things in between but you'd [also] have these heavy surfaced roads on either side of a development or green area. Whatever it was it was still going to be difficult to access.

Ayre Yes.

Michael And so it's interesting that over time attitudes change, communities have a say, people were listening to communities, and I remember we looked at a depressed freeway that was one of the [options]. I was then involved [and] we looked at a depressed freeway, a surface one, but not a one-way pair but all on Newcastle Street. We then went out to hear what the community had to say and they wanted it out of the way. They didn't just want a lowered freeway with bridges across it they just didn't want it at all. And hence for an extra at the time - a \$100 million probably - the tunnel went in and the interesting thing at the time was that whatever my view was in the nineties was that we never knew whether, [with] that tunnel, to what extent we'd need to do other things.

My feeling was that Riverside Drive would be downgraded, as it was being downgraded slowly because it was originally going to be a freeway within part of the scheme of the De Leuw Cather Group which had a ring road around Perth, Newcastle Street not Roe Street [to] Riverside Drive and it was originally going to be connected to Roe Street as we knew it. That was going to cause too much of a problem and it was eliminated that southern one. But I kept arguing that the Riverside Drive [would be] downgraded and the tunnel and the Graham Farmer Freeway as it got called would be the only ease-west link we would have in the future.

So I argued for shoulders in the tunnel which typically you don't see in tunnels; they're narrow strips at the end I'm told. But we put the

shoulders in because we only had two lanes and I was concerned and I got agreement to that. But we did do one thing more, we made them wide enough to become three lanes and while that was intended to allow for increased volume through growth and other things [with] Riverside Drive intact it didn't allow for Elizabeth Quay. Elizabeth Quay was the initiator of putting in the third lane and that third lane is going in as part of the development of Elizabeth Quay.

So what happens in the future? I think public transport's going to play a key role in managing all that and helping to control the growth. You can't do it entirely because the car is so dominant but it's improved so much in the last 10 years [that] it's just going to get better and better. That will obviously be an interesting discussion as the election looms now.

So there's just a quick snap shot but I then I should say that after doing, or working on, these bridges and working on a number of bridges around the place, without going into each one, in 1975 I [had] just completed the bridge - designed the bridge – on Judd Street. You know the curved bridge? There's a good example of [where] I only wanted a single column in the middle.

Ayre Right.

Michael Because you had to take care of the torsion I said 'oh well, we'll take good care of the torsion at the ends'. But if we did that the bridge was going to move a substantial amount [and] you'd have to almost step up to it. It was rotating so if you have a look at the bridges on Judd Street on one side, and it's on the inner side because that's the way it wants to tip over, you'll see a tube [and] in that tube is a cable - a prestress cable - to an anchor which is holding that bearing down.

Now that's [what happened] and I was happy to say a consultant who was doing a similar job elsewhere overseas rang and asked me about it because they were finding that their bridge - where they didn't put a cable down - it was starting to move. That analysis, can I say, was an expansion of the analysis that I learnt in London and initiated by

Gilbert Marsh. He originally brought it to Main Roads and encouraged us to do it that way and I was able to carry it on and do some of that work. So I've always been very happy with [it]. It would have changed now because everybody uses other methods. You can buy standard packages but again, because if you think about it, we did it for straight bridges and curved bridges but, after all a straight bridge is only a radius with infinity is it not?

Ayre That's right.

Michael So we did it from first principles and then tested it against the straight ones and it was one and the same so I was very [happy] both theoretically and practically. I was very happy that that was used and that's still an ongoing [structure]. I'm very happy that that worked out the way it did. And then after that before [it] was about to be built they thought I should go to [and] see the real world and they sent me out to Geraldton which they claim was the outer suburbs [of Perth]. But I then had the great pleasure of overseeing the last day-labour construction – a really major one of the Meekatharra to Newman road. So I worked on that until that time.

Ayre So you lived in Geraldton?

Michael With Julie. We had our little son [who] was about to go to primary school. That's the age he was so he was just on six that year. So we went there and spent three years living in Geraldton loving it. I spent a fair bit of the time in the Murchison and, remembering my father came from Cue, I was able to connect with people who knew the [family]. [They] wouldn't know my father but would know his brothers that stayed there till after the Second World War. These people have since passed on but they remember some of them as a little boy. Jimmy Price was one of them who was a long-time President of the Cue Shire Council. And the Jensens who were from Mount Magnet were also ones who remembered them. Their children went to school with my cousins. So I was able to relate, so that was always a special moment when I went to Cue.

We finished that job in December 1978 and I came back to Perth and started to work on major bridges again and particularly the Mount Henry Bridge. The contract had been let but the foundations hadn't been finalised so again [I] read somewhere about long piles and designed a bit of software that allowed for the flexibility of the pile rather than the old piling system was just two lumps of steel knocking together, or concrete and steel knocking together. If you allow for long piles and allow for its flexibility [and] somebody had developed some theoretical work which I adapted [and] developed a program. [I] then used that to calibrate the driving set on every pile that we did. You know, when we should [drive and] when we know when to stop driving in that material.

Ayre Right.

Michael I did, of course, a test pile to check it out and from that I got the calibration rules and they were used to do the piling. That shape, a V shape, of the supports I made a concrete micro-concrete model of it again concerned about the splitting nature of it and was able to work out its behaviour and [we] were able to reinforce it accordingly and they're still there thankfully.

So that's really where I came to after coming back from Geraldton and that was probably the end of my bridge engineering because I then was encouraged by certain other people like Commissioner of Main Roads and Assistant Commissioners of Main Roads - that's Don Aitken, and Bob Mofflin, and later Albert Tognolini.

I was later encouraged to explore further and I then applied [for] and got a position in charge of road design which threw a lot of people. It threw me knowing that I hadn't done it. But it wasn't about learning how to do road design it was about being exposed to another area of Main Roads, an area of management an area of technical expertise. At the end of the day if we define what we're doing very clearly, and we know the assumptions within which and the boundaries within which we are working, and we have the technology as the tools that

guide us, and we have the teams with the skills in place working on it, [then] it's a question of how you bring all this together to make it all work.

Ayre Yes indeed.

Michael And so I never worried ever more because of the experience I'd had. It didn't worry me that I didn't have the experience in road engineering [as] the important thing was, and this I stress, a new experience in engineering. The fact that you can move from one discipline - not so much a discipline - from an area within your discipline to another is just an indication that you've got sufficient knowledge of the very basic sciences and the technology, the very basic tools to make things happen. And if you have an understanding of the human relationships, and respect people for what they are, and for what they do, and what they bring to the job, and to give them time to do all these things [then] you can engage a team to work together to develop anything you want.

Ayre Absolutely. I think it's really called leadership isn't it?

Michael Well it is, but I suppose I was holding back. Because, you know, whenever I go out and people say 'oh, it's a nice [bridge]' I say 'well it's not just me'. I know it's a bit of a cliché but it's true. I used to get - the greatest pride I ever got was when I'd be talking about a bridge to one of my draftsmen. I'd always go up to the draftsman by the way and sit at his desk at his board and look at things that way, not summon him to my office.

That's a rule I had. It wasn't just a walk and talk thing it was about respecting their space. I used to go there and we'd talk and I then once heard them talking to others about 'their bridge'. When I heard that I felt we'd made it because it belonged to everybody.

Ayre Ownership?

Michael Ownership was good and that's what helped and hence if anything goes wrong - this is the part that's important - if anything is unsure

they'll bring it to your attention. They won't try to mask over it.

You only get that if you command the respect and you appreciate the technical skills. And not only acknowledging the skills but applying them in the way that you'd like to see them. Giving them that opportunity to use their skills in the best possible way. And that's the team work that Engineers Australia is all about. That's the team work that they talk about. The engineering team.

When I was involved with the council, and it's still talked about now, and that is the whole extension of the group not just the professional engineer but also the support that gives it the team that are with it the technical officers or whoever they may be and whatever capacity they have working with you to deliver what you have. I think the important thing is to never lose sight of that objective and never lose sight of the boundaries within which you are working because I believe that's where most of the problem can happen. When you just step outside the boundary and you're in to the unknown, because of the work we do do. While we can analyse it and we all know that it's based on empirical data established through research and testing, and a lot of codes that you use are empirical relationships.

Ayre Indeed

Michael And once you move out -once you try and move outside the basic fundamentals - you're buying trouble. We can talk about all sorts of things that have happened around the world where these things have gone astray. It's not that you can't go wrong [but that] it's important that the more you engage with people the more the opportunity is that those things will be found if there is a failing anywhere.

Ayre Alright I think that's a good place to stop if we may Ken.

Michael Yes.

3/00 Michael Well, there's always a learning experience and last year I was invited by Main Roads, who are sponsoring the final year engineering at UWA through a series of lectures of experienced engineers, and I was

asked to address the final year students as the final lecture in this series. I was very happy to do so and the idea was to talk about my experiences and what I could convey as messages to them.

I guess I was trying to convey messages that, you know, this is only the starting point for them. What they've got now is a foundation from which they can launch themselves into any direction they may wish and the opportunities will arise and it will be for them to choose those opportunities. First recognising that it is an opportunity and sometimes it'll be in areas that they're uncomfortable with but it won't happen just [like that]. I was explaining to them that and went through my, pretty much as we've discussed now, the various sections, and I talked about the turning points in my career and the points that helped to make a change. I probably didn't know they were turning points at the time. Others did, I didn't.

For example the first one would have to be going away to London and exposing, getting exposure, to wider areas, talking to some of those earlier speakers that we had that really inspired me that just said 'how do these things happen [and] what makes all this tick, how do you find out. And the learning process never stops. Right to this very day if I stop learning I'll be disappointed because I've never failed to pick up another point that refines something I knew, or adds another bit of difference, and that going away and getting that basic [understanding].

You don't have to do PhDs to advance [and] I'll never be saying that. In fact I don't push qualifications, only they're important that we have them, but what is important is experience. You need to gain that experience in any way you can be it through working for major organisations, or working in a different sort of environment, in any way you like, or doing what I preferred which was to do more studies. Again because I was very keen to do so.

Then when I came back I guess I suddenly found myself sent to the regions so turning point two going from engineering boffin stage in

bridges to broad communities. The Geraldton experience was about understanding community, it was about listening to community, it was about remembering that all the provisions you're making are not for yourself but they're for someone to use, whether it's the community generally for access, whether it's for tourism, whether it's for industry, in whatever form it takes that is what it's about.

So that exposure, which was really guided by others, I didn't choose to go to Geraldton it came, I'm pretty sure it came, from the Commissioner Don Aitkin at the time. I was asked the question, I remember being asked the question, and then said 'no [I'm] going to have to go and ask my wife'. I don't do anything without asking my wife. I was looking for a, you could see, I was looking for a way out because I don't think I wanted to do it.

At that time Julie, we were here in this house and Julie's mother lived with us, a wonderful woman great supporter of us and so I was concerned about them. I didn't want to break up that family relationship. So [I] turned around [and] I came home expecting to be told 'no you can't' or 'no we can't do that'. As [is] typical of my wife she said 'it's up to you. It's your choice. I'll support you'.

Always that's been the case right through it. And Julie's mother was the same even though we'd have to go and leave her. But, you know, things do work out because she spent half the time in Geraldton as well. We used to take her up [there] and spend [the] cold months down here. She enjoyed Geraldton. So virtually we still kept the family connection and did it that way so it was a turning point two for me.

Michael Then after a number of years, after coming back from Geraldton [in] '78 until about- I've forgotten when it was - it must have been about '82. Four years or so [then] I suddenly found myself in charge of road design. There's another bit of exposure. So here I was started [again]. The only thing I ever wanted to do was to become a bridge engineer and then following that so that was turning point three.

I guess the thing that set me on my path to Commissioner of Main Roads was when I was made a Director. I applied and got a position as Director Urban I think it was, or Principal Engineer Urban, they change their titles, which was looking after the construction of the south west region and the urban and metropolitan area.

That exposed me to the big contracts, the management of them, financing of them and obviously planning for the future and allocating funds and so on.

Ayre Yes.

Michael That helped me get to Assistant Commissioner and then Commissioner. So I reached the peak it was probably the four turning points that did that. And I turned round to, you know, I do recall in looking at my future which I didn't look at in the early stages. I remember doing an organisation chart in my [career path and] I said ' [if] this is going to be a career I may as well work out where I'd like to be'. And I've still got it somewhere in my [archive] boxes I must [have some] hand-written thing.

Where did I finish up in that chart? I never told anybody and I probably haven't put it on record until now [but] I actually saw myself as in charge of design. If anything [what] I wanted to do was to be in charge of design. I'd worked on Codes of Practice, I'd worked on analytical aspects, I'd worked on construction aspects - not directly but indirectly - working with teams in the field and, of course, did research as well which helped us develop some of the thoughts and ideas we had.

It's the beauty about Main Roads and Gilbert in particular, and Don Aitken, and Albert Tognolini, and Bob Mofflin, who was the central group, they encouraged us. Gilbert made me, gave me, the free thinking as well as Graham Glick did it when I was a student. Gilbert Marsh never intervened. He let you make your own mistakes but he never let them get out of hand.

Ayre They're very valuable [learning experiences]. Yes.

Michael If you know what I mean.

Ayre I do, yes.

Michael And he believed you had to learn yourself and we were encouraged to be creative. We were encouraged to try new ideas. They had to have a sound technical basis, and a proven technical basis, so whether it's by testing, or analysis, or whatever you could. But he would listen and he would encourage. And probably that fundamental thinking that I was given through my PhD, Honours, and through Gilbert's early work. And through George Hondros, who I had [worked with] through the times that he was there, he basically taught me how to do structures from scratch. Graham Glick enhanced it and in practice Gilbert Marsh sort of brought it to fruition so we had those four turning points. There were about four [as] I said.

Then I left Main Roads as Commissioner and became a consultant, like all good public servants I guess. I set up Ken Michael Pty [Ltd]. I called it Ken Michael Consulting but that name's lapsed now it's now Ken Michael Pty Ltd I was going to call it something else but my son gave me advice. My son said people will want to - if you want to do work now at this age because I was 58 or 59 - people want to do it because of you, otherwise they won't want to do it, or you won't get anything so you should test it yourself in your own name. Hence I called it Ken Michael Consulting and Ken Michael Proprietary Limited and I did get quite a bit of work which I could go on to and that also changed.

I went into regulatory work for the [gas] pipeline [but] that's another story. And then went into - then had the great opportunity and Julie will tell you how much she valued this when I was made Chancellor of the University of Western Australia.

Ayre Alright. Before we go on to your work as a consultant I'd just like to revisit your role as Commissioner of Main Roads if I may.

Michael Yes, sure.

Ayre The question that I've had to deal with in my own engineering career, and I'm intrigued to know how you feel about this, is you have confessed to having an interest in design.

Michael Yes

Ayre As you climbed that ladder up the hierarchy how did you feel about leaving design behind?

Michael Oooh, I think that's a wonderful question. I think, when I was Governor we had a driver and I must tell you we used to drive around - this is only in recent times - and we used to drive around and I said 'Michael that particular bridge, or that particular road, that happened here' and I'd give him the back ground. This even happened when we went to the country areas as well and although he wasn't driving me then, we had our own vehicles, and that showed the passion I had even to this day.

I always say that, after Julie, bridges are my second love you see. He then jokingly used to say 'when I finish this job I'm going to set up a tour agency that's going to only do guidance on the road and bridge network in Western Australia. I've got enough information to be able to tell it as the Governor told me'. He's gone to the east now.

So I was very [passionate and] the answer is I didn't want to. I didn't want to [but] the Geraldton move that was the critical move.

Ayre I see.

Michael And I didn't want to do that and I was actually almost hoping the family would say no and that was a chicken way out I know. But that's because I had this love of bridges. I just have this idea [that] I look at some of the bridges now and I see lumps of concrete.

I wanted elegance in bridges and I wanted the material to be exposed and I learnt a [lot when] Gordon Stephenson took me around. He was our architect advising us on the first Burswood Bridge in the early seventies. He took me for a walk with Gilbert Marsh around East

Perth when it was what it was [originally] and we walked all round and he told me stories about that area and I was telling him about - I showed him some of our bridges. You can see particularly on what is the Hamilton Interchange, if you look at them they're covered, the bearings are screened and I said 'we'll be doing that, we'll screen the bearings like that'.

And he then turned, this is Gordon Stephenson, [and] he said 'why are you going to screen the bearings?' I said 'well, because they're not the nicest things to look at I guess'. And he said 'but why?' He said 'that's the function of the bridge. That's how it works. It moves and rotates on those bearings does it not?' I said 'yes' [and] he said 'well my suggestion is you leave, where you've got bearings, you leave them exposed'. And I said 'well that makes sense because not only does that help but it's also from a maintenance point of view sensible'.

So from then on none of my bridges - I don't think any bridges - unless they're encased integral with the bridge itself with a diaphragm which you do get in such jobs as Malcolm Street where it's all integral. There's like a portal [where] they make up a portal across where the diaphragm is the beam. Which you can't see because it's built within.

Ayre Right. Of course.

Michael But that's how it would operate. But when it came to Judd Street we needed something that was more flexible and hence the bearings are exposed. So if you drive underneath those you'll see the bearings.

And from then on no bridge that I certainly was involved with had a bearing you couldn't see and that encouraged you to make it look good. Fortunately bearings became nice and neat and compact and they became more slender better materials as you know. So you'll find that that was the case and that taught me quite an important lesson.

They're the sorts of things that I enjoyed doing very much. But one thing some people, my friends, my colleagues used to say that 'the bridge just fills the gap between the roads' and I always used to say 'but without the bridge you can't make the road work' because, so there used to be that timing [sequence required] and when I was given the chance to go to Geraldton - I probably digress too much there - I did see it as an opportunity. I was guided and I think I was under so much pressure with other work too, and other things I was doing externally, that I probably saw it as an escape as well up to a point.

But more importantly I saw it [from the perspective that] if this is being suggested then I shouldn't just ignore it. And that's why we moved.

Gilbert Marsh I would say to this day [that he] would have thought I won't take it. He was surprised when I said that I would. I think I was surprised.

But it was a thing that I realized at the time, I can design the bridge, I can put it in place, but I'm not responsible for the bridge being there. That's been conceptualised through other planning mechanisms and so on.

Ayre Yes.

Michael You know I haven't come and said 'I'll build a bridge here'. It's always been part of the total package as we know and to be part of that I always felt I have to have a better understanding of how the system works, and how you manage, and what people are, [and] how to relate to communities, because I think at the end of the day as I've always said communities are the voice of what should follow not necessarily on a voting basis I don't necessarily agree with that. You might do that in elections but you must still do what's best considering the views expressed by others and at the end of the day your decision is based on the social, environmental and economic

needs of that particular project.

Michael So it exposed me to management which I liked and when I came back and was put back into bridges, which everybody thought that's what I wanted, there was a sense of disappointment.

Ayre Really?

Michael Yes I can still remember it and I [was] wrapped up in to Mount Henry Bridge and others. I enjoyed that and I guess I felt that if I had any say in anything I need to be able to understand how the place works and how management works.

Ayre So was there a sense of having moved on from bridges?

Michael Yes it was. I didn't think I'd ever go back to that and I was a bit - it's not what I wanted to do anymore - I wanted to be involved. I like the idea of being involved, conceptually but I didn't want to design anything in that sense.

And when I went to road design in charge of that they did one more thing for me. Don Aitken as Commissioner, the late Don Aitken, he actually encouraged me to go to the Mount Eliza Administrative Staff College.

Ayre Yes, I went there myself.

Michael Yourself?

Ayre Yes.

Michael I had a six week course.

Ayre That's a turning point isn't it?

Michael I should have mentioned that. But that was part of the package of the road [design] - that was part of the total package - and I learnt from that. They were able to assess me better than I could assess myself on the basis of just how I reacted and how I managed and how I [thought]. One thing they found that when I did the final interview they told me that where they felt I had a strength was in

organisational structures and reviews and understandings.

Ayre Really?

Michael That impressed me and I suddenly thought ‘well I wonder if it’s my engineering, you know, structures?’ I often talk about formal structures stemming from engineering but I always say through the advice of many others that form follows function so that you have to understand how things come together before you package your structure to support it. And so I always give a lot of my talks an engineering flavour even though I’m talking about general management.

Michael Management controls strategic planning [so] I then got involved in doing that as well. I think I was a Director Management Services for a while, or Acting, or something. I got very keen on looking at how you might put together an organisation, how you would assess it. I got very close to Quality Management. When it was promoted as Quality Management I was Chair of the Australian Group and I pressed for getting the process right and having measures to ensure that you were okay. But we had to have an overarching principle of how you must look [at] what’s the global position before you get down to that so [one asks] are we meeting the vision in getting down [to that].

Once you get in to the process it’s too hard to turn back so you need to know. You need to get that first part right and I break all that down in to four words.

Ayre And they are?

Michael Why. What. How. When.

Ayre And ‘When’. Yes.

Michael They are those four words are the words that I learnt to apply to everything I do. And if I’m not sure I go back to the beginning.

I think it was [de Bono] the lateral thinker who said ‘when you’re unsure of something go back to the path where you started. Go back

down the path you started, look down that path and if it makes sense stay with it. If not change.'

Ayre I digress here a little but it's associated. A very experienced engineer that I worked with a long time ago said to me one day 'what is more important than an elegant solution is to make sure that you're actually solving the right problem'.

Michael I couldn't agree more. Have you defined the problem well enough? Have you assessed what the assumptions are? Do you know what your boundaries are?

If you're playing a game of football you play it within the boundaries, you know what the rules are. You jump outside that boundary the rules no longer apply.

So you could make some serious errors or you could make some poor judgements as the case may be. But I came across, and I remember, a book and then I got very involved in management and strategic planning in particular. We used to call it corporate planning like a lot of the others [did]. I was very keen on behaviour and I did the - what's that assessment of that you do - oh I'll remember it in a minute where your psychological assessment. I'm an INTJ anyway

Ayre Yes.

Michael The Briggs, Myers Briggs.

Ayre Myers Briggs.

Michael I'm an INTJ It's interesting because the 'I' is that I'm not very external. I'm actually an internal person.

Ayre So introspective?

Michael Introspective I suppose.

Ayre Yes.

Michael T is for thinking. 'N' I think it's intuitive and 'J' is judgemental. But I was not an extrovert. I'm an introvert and when you talk to me

people say 'you can't be, not the way you are'.

I learned how to go outside but it doesn't mean I don't go and escape in my own little world every now and then because that makes me comfortable too. It also gives me time to reflect on what I've done. But I learnt - we know there was a book and I was very interested in organisational development and there was a book 'Re-engineering the Organisation' or something like that and I've forgotten that. One of the authors was Michael Champy I think. Please I need to be correct, I'll look it up.

A lot of those fell by the wayside later in life so he wrote another book and it's about this big and I was Commissioner at the time and I bought one for every Director to read. I just thought - it was 'Re-engineering Management' - your vision's in place this is the next step. There used to be the seven 'S' skills and so on that you used to have to manage. Shared relationships or whatever.

And he had four words as well but they were different ones. They were, Purpose, Process, People and Culture. So you have to know why you're there. Well that applies to the earlier one as well - your planning process. But you need to have the right process in place, you need to have the right people in place, and you need to have the right culture.

And the culture I translate to 'values' and so I talk about values-based organisation and if you've got that, with the same trust and respect from all the people around you, and that you act with integrity you can make anything happen that you want.

But the very fundamental basis of that is what you said earlier you have to know what the problem is that you are solving. You have to know what the boundaries are, what the assumptions are, and you must never move outside those boundaries without consciously doing so and knowing why. You can do it but you need to know why.

Ayre

Yes. You don't do it by default you do it deliberately

Michael Deliberately. And so that's where, and that's when, I started to think along those lines and why whole concept changed, and going to Mount Eliza was certainly one of those turning points.

So I've got more than the four I guess. It's becoming even rapidly [the case]. And then when I went in to the consulting [and] I had to pick what will I want to do, what sort of work will I want, and I made up my mind I don't want to do design.

Ayre Really?

Michael Mmm. I said there's too many designers out there I'm 58 or 59 - I've forgotten what I was I was - 59. And I just want this for the next four or five years and so I'm going to choose engineering management, I'm going to choose strategic planning and reviews.

So I did supply reviews, contract assessments, tender evaluations, reviewed organisations, you know, and other things that were around. Task driven and some of them I can talk about but I did find myself very, very well occupied until I was given the role of being the gas pipeline access regulator for the Dampier [to Perth pipeline].

Ayre Oh of course you were, yes.

Michael I was that so we can tell another story on that because that was quite different. I was doing that while I was a consultant as well. So that's in a separate story.

Ayre Right.

Michael Then I went on to - I had the opportunity - I was on the Senate of UWA. I chaired the museum, WA Museum. I was on the, and I stayed on, the East Perth Redevelopment Authority as it was called - [it is] now absorbed within the Metropolitan Redevelopment Authority - and started from scratch you know as member of the board as a Commissioner. They kept me on later and I was eventually Chairman. I was there 15 years and saw it from the very beginning until I came into the role of Governor.

I could tell a story of each of them I guess and then I moved on as

Chancellor something I know Julie was very, very proud of. Gave me great support and I loved it I must say. I did a term and a bit because I got encouraged to go somewhere else.

I guess that was another significant turning point but in part because I still think that was a building up of [events], but the key issues were the learning part, the opportunities, the paths, and I think where I was as Chancellor.

You've got to remember I was - oh I've forgotten how old I was then but it was 2001 - so I was a good 63 I guess then, and stayed there until 2005 when I was announced to be Governor.

I think they all contributed to those but being Chancellor I think gave me that extra exposure broadly to communities, and talking to student bodies and graduations, and going away overseas not too much but China, Hong Kong, and so on, Singapore. And so we managed to do all these things so they were the key points.

And then eventually out of the blue I was asked, and it was out of the blue, asked to be Governor in May of 2005.

Ayre Alright. I'd like to stop there if I may Ken.

Michael Yes, I think that's good.

4/00 Ayre My name is Doug Ayre the date is the 25th of February 2013 and I am continuing with the interview of Ken Michael.

Ken, would you like to tell me about your role and involvement with the University of Western Australia?

Michael Yes thank you Doug and thanks for the opportunity again.

The University of Western Australia is obviously very close to me because I'm a graduate and I've had a long association with them. And when the opportunity came to join the Senate I was very pleased to be part of it. The Senate being the governing body of the university, called Councils in some places and Senates in others. And I think that has the intention of guiding of, obviously, the university

[and] giving it strategic direction, making decisions in respect of investments, and so on, and of course exploring the education curricula through [and] with the Vice Chancellor in the key role who is also sits on the Senate. We have also representatives from various sectors within the university including the students, and including the staff and, of course, community representation and the Alumni.

So over time when I was there they reduced the size of it from 24 members. I think it went to 21 or so and it might be even getting less now. There was always a move to have a smaller group but we stayed with the slightly bigger group. It's a cross sectional group so it's a representational more than a management role because you're there by virtue of position [and] representation rather than necessarily a respective skill. But it provides a wonderful insight into how the university should respond to some of the sort of views that are held within the campus. Within that we did have a Chancellor's Committee which was made up of- and I'm assuming it still happens but I was very keen to have it because it's made up of - the Chairs of the Committees, and the Chancellor, and the Vice Chancellor and they really had [a valuable role].

Although they never had any formal role under the eyes of the Senate it was a very good administrative and management role for just assessing your situations and bringing them forward and just taking time out to explore our thoughts and ideas that could come to the Senate for consideration. It wasn't a decision making group. But it was a very useful supporting group of the Senate as we did have committees as well that provided input to the university. I enjoyed being Chancellor.

For me being Chancellor of the university was such a great privilege and that happened in I think it was April 2001 or thereabouts and I had four-year term. Four-year terms were introduced that year, and the other change that was made to the Senate selection [process] was prior to my election. The appointment of the Chancellor could be, or

was supposed to be, from within the Senate itself. When I was considered for it [it] was time to consider another Chancellor, the rules had changed and the regulations had changed to reflect that it would be every four years and it could be from anywhere within the community it did not have to be a member of the Senate.

Previously it was from the Senate as I mentioned but it was on an annual basis as well. So that changed and then it also changed the size as I mentioned and I think from 24 to 21 as I said. And so I was very pleased to be given that particular task. And when my time was up it was I was re-elected for another four years that was in 2005 around the same time, April, but I chose to explain to the Senate that I would only remain there for half the term if that was acceptable to them. The reason is that the term of the Vice Chancellor was coming up as well so I felt that it would be better to have a new Chancellor who would be able to have time with the existing Chancellor. I said it was coming up [and] the Vice Chancellor would be half way [through] his term and it would be better to have [a new Chancellor] at that time to get the background and so on, rather than both of them going at the same time which I always find difficult to manage and not fair on the organisation in some respects.

So as it turned out I left a little bit earlier because of other things when I was offered the position as Governor so I had no choice but I needed to resign. And I let that be known and we then searched for another Chancellor and I was delighted that Michael Chaney was able to take on the role. So the Senate as always being very special in the sense that I've been able to contribute to its future in some small way.

One of the greatest delights as Chancellor is being part of witnessing the graduation of students. Each student that came across the floor in their 10 seconds of, if you like, of enjoyment and pride to me were very special and I treated every one as Number One. And I'm happy to say that when I left I think I [must have] shook the hands of 10,000 so I'm very proud of that. The way it's all done at the university it's

in Winthrop Hall, the majestic Winthrop Hall, it's just so grand that it's a delight to be there and you never tire of it. At least I never did. I don't know how others feel.

I only missed one graduation ceremony in all those years and others may think that that was going too far but I just felt, whether they knew me or not, they knew it was the Chancellor giving them their degree and I think that was important. They may not recognise me beyond that point but that's not the issue. The issue is the role and the position and I've always taken great pride in that.

But we did have the chance to look forward and have strategic planning exercises and on the guidance and advice of people like our Vice Chancellor Alan Robson [and] Deryk Schreuder before him, then Allan who came on during my term. A great advocate of the university as well. And then now we've got Paul Johnston who's another person who's come and joined us for this centenary, which is 2013, of the University of Western Australia. Centenary in the fact that the first teaching took place 100 years ago. The centenary of the actual formation of the university. The legislation passed in 1911 and interestingly that was the same year Perth Modern School was formed and I'm an alumni of Perth Mod so 1911 was rather special both ways.

It's interesting that 2013 for me is a centenary for UWA in respect of teaching and student entries. And I happen to be on the Board of the North Cottesloe Primary School where my grandchildren are and it's their centenary as well so lots of things are happening around Perth.

Ayre It's a big year.

Michael It's a big year.

Ayre On the subject of the university, just digressing a little, you say it's 100 years since the first teaching commenced. Where did the university actually start its work?

Michael The university, the first university, was in Irwin Street in Perth and

the building from Irwin Street was dismantled and it now sits at the edge of James Oval I think it is where convocation offices were or they were when I was there. I don't know what's happened in recent times. And it just sits there, and you can watch it almost watching sport from that area, but there are offices inside so that was the original [university]. And of course engineering was one of the early [courses] - was one of the degrees - that started that year so it's significant. And I think I'm right there I will verify that but I can't remember how many started that year now but I'll have to [check]. I thought there were at least three courses. Engineering was one of them as I understood and so it's a pretty special year in that respect.

And it's interesting because Modern School was created in 1911 by people - similar people - that set up the university as well. There was a lot of [momentum] to set up. There was this interest in science and the need to get technology in place, and people could see then that things were changing. And there was a great emphasis on getting a school such as Perth Mod which was the first public school - secondary school - that concentrated on these key subjects as well as a university that was being promoted by Winthrop Hackett. John Winthrop Hackett who was also, I think, editor of the West Australian at the time.

So there was a great push for the formation of a university and it actually - thanks to Winthrop Hackett - it all took [place] - it did happen. But he also left a legacy, a very generous [one], I think it was £450,000 in his will to the University which I think became available in around 1919 maybe.

Ayre That was a lot of money in those days.

Michael That was a lot of money. And the stories are there and I'm just guessing now because I haven't looked it up for a while but I might say that you'll [find it]. It's in the book 'Campus by Crawley' which was written by Alexander Reid. There's also another book that's just been launched last week in fact as part of the centenary celebrations

on the weekend of the 8th - starting the 8th - Friday the 8th of February and on the 10th I'm pretty sure a book was launched on the centenary of UWA. I think that was written or edited by, or both, by Jenny Gregory. I haven't seen it yet but I intend to get myself a copy.

So in there we'll find out some of the statistics but it's a special year all round for all of us because The University is now looking to the next 100 years and it is for the first time now ranked in the top 100 universities in the world. It's at the latter end, it's in the 90s, but nevertheless it's the first time it's reached in to that. And I think it will go from strength to strength.

It obviously looks at reaching out as well as expanding its own campus. You only have to look at the business school, I think which is one of the most recent additions, and how well that's been received and what a wonderful job the whole group is doing in bringing [and] making opportunities for others to study.

They've also changed the core structure now this year. [Possibly] not this year but I think, it's fully in place now that you need to do a basic degree first one of I don't know how many five, six, seven basic degree before moving on to a Masters. So they've taken on what others have taken on around the world. I think Melbourne University is like that as well. I'm a total supporter of it because I've always felt that you always need it - just like the A Levels in the UK - at least a year of general study. But this way if you want to do engineering you'd probably do science [and] I would expect [that] or maths. That would be within, perhaps within, the science anyway. But you do a science degree and you then can move on and spend an extra couple of years doing a Masters. And it goes back to maybe I suppose it'll end up being something like a five year course. I'm happy to say that's what I started on. It used to be five years then it became four. Did you [do] that?

Ayre

Yes me too.

Michael So I was in the tail end of the five years. They were starting to - I think one of my years was a two term year - so they were gradually phasing out and that was [coming] in. I finished my degree [and] my final year was 1960 so they were starting to phase out then.

So I think it's had its early beginnings in the centre of Perth and moved to the magnificent Crawley site and they've been expanding since and gradually expanding the campus and taking interest in properties that exist around there. I think you've noticed some of the activities have moved towards Fairway and so on?

Ayre Indeed, yes. It's a superb campus it really is.

Michael It really is yes.. Well we were, Julie and I, especially pleased because - I must admit I think it was a couple of years ago probably in 2011 - [to receive] recognition. They were naming [and] they were recognising different graduates which was nice. And they've named a building on Fairway which was the old Motorola Building and we're very happy they've called it the Ken and Julie Michael Building which I think is [very nice].

And in fact we're going there this Friday [as] we've been invited back to the building. We haven't been since it was opened a couple of years ago and we're going to meet the students which we're looking forward to.

Ayre That's nice. Good for you.

Michael But you know that was unexpected. I think you know [that] for us no matter how long it stays there the fact [is] that they took that step even now.

Ayre It's a nice compliment for both of you isn't it?

Michael Well it [is]. The thing that it does and it shows for me [recognition of Julie]. I know I include Julie in everything I do and she supports me in everything I do and she's been a [low profile person]. She doesn't like the front line but, believe it or not, she prefers to stay away. Even recently I had a photo taken, I was opening something or making a

comment somewhere, and we were both called up as Patrons I think. She wouldn't [attend and] I had to almost drag her up to the stage and even then she stepped back. That's the way she is and that's the way she'll always be but everybody knows around her that she's the strong support.

Michael I couldn't have a better recognition than that and it happened once before when I finished as Chancellor they post Convocation Awards - or name particular postgraduate fellowships after Chancellors - so there happens to be one for Geoffrey Kennedy and Alex Cohen and when they came to do [it] they asked us if we would like [that] and I got a phone call from Convocation [and] he said 'we would like to call it the Ken and Julie Michael postgraduate fellowship' or scholarship, whatever it was called. And I was delighted and I think that's the way it is.

Ayre That's excellent.

Michael So I think the university, and having said that I shouldn't detract from all the other universities that I've become close to, and I respect each and every one of them. We're very fortunate to have such a wonderful collection of tertiary education [institutions]. I think the collaborative work that is being done, and I hope it increases even more, is a recognition that we can actually build our strength by bringing the best of both together.

Ayre It's interesting. I've done quite a bit of research using the local newspaper archives studying the technology of street lighting and going right back to the eighteen nineties and you can see reflected in the newspaper reports, even of general nature, that there was a great respect and enthusiasm for new technology.

Michael Yes, yes.

Ayre And you could see that was a driving force for education.

Michael Yes. I sensed that when they were forming places like Modern School where there's a beautiful statement by one of the [founders].

I launched the history of Perth Modern when I was Governor and was delighted to do that. No, before I was Governor, I was Governor Designate. I was delighted and in there they talk about the education department talking about that very thing [that] we need a school to be able to promote physics and other [subjects].

Ayre Yes. Shall we pause a moment?

Michael Yes.

Ayre Perhaps then, bearing in mind your education at Perth Modern School and then your involvement with the University of Western Australia both as an undergraduate and graduate and eventually through your various roles, could you tell me a little about how you became Governor of Perth Modern School firstly, and secondarily the changes that you've seen in education since your days as a student right through to today?

Michael Yes. As far as Perth Mod as I became, I was, Patron of Perth Modern School. Just to put it in to context not the Governor probably because I was asked to do that for specific reasons.

Ayre Okay, now you were talking about your role as Patron.

Michael Of Perth Modern School. Yes. That happened when I was Governor but it goes back a little bit earlier. I went to Perth Boys High School in which I probably mentioned before in James Street where PICA is - the Perth Institute of Contemporary Arts - opposite the library in the cultural centre there. That used to be the school, the Perth Boys High School. In fact there's a reunion coming up I've just been invited to which takes me back. And I left there - my final year there was 1955 and in 56/57 I went to Perth Modern School after doing the, then, Junior as it was called, before taking on the Leaving at Perth Mod.

I went there from there [and] I went to the university but when I became [State] Governor, or was Governor Designate, I was invited to launch the History of Perth Modern School and it's quite an

interesting book. It's very much anecdotal as well as historical and [there are] some good features in there of people and different groups, different streams, and certainly Brian de Garis I think wrote the overarching history. David Black was the editor and he put the whole thing together. It's a great book and I had the chance of doing that.

It caused me to go back in to the history of Perth Modern and, as I reflected, the first secondary public secondary school. There was this desire to get some interest in the physics, I think I remember it being said, and the general stream of technology. Clearly people understood. We don't have to look back over the years. It's nothing new that science is so important to understanding and getting the knowledge that we need so that we can apply it in different fields such as in engineering and in medicine.

So the technologist I suppose applies the knowledge that is going from the pursuit of science. It very much took on that role and it was one that you entered on an academic level so that entering into first year or whatever it's called. Year Eight as we probably know it today and even that's changing.

We, people, needed to go for an exam and I went for the exam. I didn't succeed in that exam but the opportunity was there for me to try again or to gain entry on the results of the Junior which I was able to do so, as did my brother Con. We both were at the university. He was leaving when I was entering the course. He was two years ahead of me. We both went there and very much the emphasis, that I remember, was the physics, the maths, the science, chemistry, and all those subjects which gave you a good grounding. You had to do the electives [but] you didn't have the broad range that you have now. It was rather restrictive. They're the ones that you use and English of course was pretty critical in all that. They're the ones that I took [and] with me, clearly, they were the areas of interest that I had and hence engineering and so on.

I then pursued my career but during that time, and right up till the time I became Governor, there was a bit of a change in emphasis in my view towards the sciences. Students in later times were given the opportunity to be selective in what they did towards the TEE and there were different [options]. I am maybe not as well informed on all the issues but I got the impression that some of the sciences were just, you know, they were [general] science but not at the high level you might need to do medicine or anything like that, engineering and so on. That was to make sure people, I believe, get the right emphasis on science but at the same time concentrate on those subjects that they were more inclined to do.

Ayre Yes.

Michael I always felt that like most systems it's also a way of finding your way to the end a lot easier. I guess if you're very well versed in science you do the simpler ones and you got more time to do the others and I think that detracted from science over the period. I've been vocal about that in the past. I've always felt that it was not the way not the way to go. I remember saying even the way they taught maths I thought changed over time from looking at the mechanical aspects in a mind set to viewing models that they used to use the coloured rods and so on. I know we learnt the times tables by rote but they've always stood me in good stead to be honest.

But whatever the case I don't see quite the same reaction when I test people today - young people. I also notice that Modern School became [or] moved from the academic side to the music school that it became well known for and so you didn't require that examination to get in to Modern School but you needed to be have musical talent as well [as] that would get you help to get you in. Then in about 2007, I think it was, they brought in the next [change]. It might have been 2006/2007 [but] they brought back the academic selection process that they used to have. And that is now.

I remember as Governor pinning the pins on the first lot of Year

Eights that were selected to go into this Modern School - about 180 of them or something - and I pinned them all on. Maybe 108 I think is probably [the] better figure. I pinned them all on there and when I was Governor Designate as I say I also had the chance to launch the history that we were saying.

So it was interesting to track it all through and suddenly we find we're back in to the academic side. Then, interestingly, years later after I'd finished as Governor in fact the year I finished, 2011, I was asked to go and address the students at their graduation [but] what I had not realised [was] that graduating class was the very class that I'd pinned five years before.

Ayre Really?

Michael So it was 2007 I think and that gives you the five years. And [so] to the end of 2011. I pinned them and then I had the chance to speak to them. We had in fact, I was reminded of that by the students - some of the students - and we had some photos together. So it was a rather nice touch.

But on the issue of science, where I suppose I became a little bit vocal on in the role, I wasn't talking about policies or anything like that I was simply talking about the changes that took place that could undermine the emphasis on science. I recall as Governor going, I think it was in the Kimberleys - I'm trying to remember where it was now but it was up north - I went to one of the schools, and I might have mentioned this before, but I walked in and there was a young teacher [who] must have been early twenties and she had all these children - and I think have mentioned it - all lined up in the classroom, or not lined up, all in this one classroom. All different grades so that was a mix and they were all playing with leverages, and weights in water, and balloons, and all sorts of things physical. And I said 'what is this for' and she said 'well, I'm just doing some practical physics, practical science, and I said 'why?'. And she said 'because she didn't feel science was getting enough attention'.

So I thought that was interesting and I'm sorry I couldn't find her name out because I [was impressed]. But I never did because I didn't want to do anything other than observe it. Then we came back and I said 'here's this young girl' this would have been in the early part of my time there 2006 or 2007 [and] I said 'there's this young girl at her age recognising the value of science and taking action in respect of it and she should be admired for that and here am I in a position as Governor not doing very much except speaking'.

So I created the Governor's Science Forum and we had five science forums during my time following that and they were all invited, you know, [including] kids from [schools]. Eventually, initially, they were about climate change, marine science, renewable energy, [but] not nuclear [because I] thought that would be a debate on its own I think. Not that, because I didn't think it would achieve a useful purpose, I think it was better to concentrate on those things that I knew could happen and not on things that might happen. And that's for another scene I thought. And of course recycled water.

Ayre Yes sure.

Michael So I did all those which are all very topical and they were made up of about 40 or 50 people over a lunch and one table of students and staff. Having done this and I thought the reactions were good. Eventually we wrote some good reports from it and they were distributed [and] were on our web site. I'm sure you can still get copies of them. I think I said I'd send you some of those - that's what I'm thinking - I'm not sure. There's some good reports of what people said but particularly the last one and I have a feeling I discussed this at the last interview and that was to do with bringing the youth in and I called it Youth, Science and Sustainability. We invited 150 students from around the West and their teachers. [There were] 70 teachers so there were 220+, or so, plus some other guests. So we had about 250 in Winthrop - in Government House ballroom - Lyn Beasley who was the facilitator of all of them did that and she's

a great advocate of science of course particularly as the Chief Scientist now. She ran these for us and they were just marvellous, and we wrote reports, and we had these students having to get up and speak about what they were talking about. Not everyone, but we got all their information. It was all collated but some of them were selected to speak. I left that to those who were willing to do so and Lyn handled that very well.

But my main purpose was to put an emphasis on science and interestingly, even now that I get involved in education in other ways, I'm continuing that message and trying to encourage our Chief Scientist, and she very willingly goes to visit schools that would like to take that up.

So, yes, I've always said science is about knowledge and engineers and so on are about the application of that knowledge. So science and technology go hand in hand. It's the very foundation of going forward and I think that we should maintain that.

5/00 Ayre Right Ken I'd now like to move on if I may to your role as Gas Pipeline Access Regulator. I see a smile, a wry smile, on your face.

Michael I think [that] the title more than anything is a mouthful. But I was. Yes well when the time came it was 1999 and I was consulting then because I'd finished in '97 and I was given an opportunity, shall I say, to apply for a position as the Gas Pipeline Access Regulator. A single person body - it wasn't even a body - single person who was the regulator. So that any challenges that took place in the courts had my name on. It didn't talk about the body it talked about my name. So it was interesting. I tried to have that changed but the legislation was such that, you know, the body - the name the body - wasn't the title. The body was the person so, therefore, [that was it] whereas in the case when it became the Economic Regulation Authority of course the body was the Authority itself as the Commissioner of Main Roads is and so on.

Anyway I always remember the sensitivity of that and the reason was

that I was told it would take two days a week - don't worry, you know, it's pretty straight forward [and you have] got a Code to work to. Well the two days a week did go to seven days a week and believe you me it was a fixed fee so if I could do it in less time I would benefit personally but it never happened. And I was determined to see it through. And the important position important thing about the position was it was independent. I'd have to [right] at the outset I'd have to respect the government of the day [and] you know at the time when I was appointed I was left [alone] - and it was probably both governments involved - so they respected the fact that I was independent.

And there were other avenues of course that people could challenge, that's the Supreme Court, which did take place. And the big issue of course was the Dampier to Bunbury pipeline and the regulation of it. It was sold to Epic Energy and the new Code which was a National Code was to regulate all pipelines. Well, not all pipelines [but] pipelines that were specified in the schedule [and] this was one of them. And the pipeline was a very prescriptive Code and it virtually gave you the process and the elements to look at. And there was one word in it that everybody seized on as being the opportunity to vary and I'll come to that in a moment. But my task was to set the tariffs for the transport [of gas], tariffs for the Dampier to Bunbury pipelines, approve the access arrangement, the conditions, and the tariffs that would apply, and the work [that] was done at the time all those years ago before the sale and the information related to it, that was all available to us.

And I think the issue was that I came out with a draft decision which was a lot lower than I think their figures [were]. If I remember [it] was \$1.00 to Perth and that would be per [gas unit] I guess and \$1.08 to Bunbury. And so having said all that, and worked out whatever that was, the tariff - \$1.00 and \$1.08 was written down. Well it was certainly documented as such. But it was only, it wasn't the end, it

was simply an indication.

And so when the time came that we did the assessment and it was all to do with the regulatory costs or regulatory value I should say of the pipeline itself and the regulatory value of the pipeline at the time was I think it was \$1.2 billion. And as it turned out that gave rise to a tariff in the late 80 cents. Lots of figures were quoted instead of the dollar which created a real turmoil.

Now the reason that that happened was very simple. The calculation is not very complicated you've got a weighted average cost of capital you've got a regulated value [and] your result is a tariff.

Ayre Yes

Michael Even an engineer can come up with that. The result was what happened though, was that in the meantime, from the time they bought the pipeline until then the interest rates had dropped and the figures they'd given in the final decision - and you can actually read what they worked on compared to what they had - and of course they dropped down between 7% and 8% I think it was. Which is a lot lower [and] which reflected that particular value. Hence the, you know, the concern because they had paid \$2.4 billion for the pipeline. But the regulatory value is not necessarily related. Well it can be related to, but it's not necessarily equal to, the cost value.

But they went to the Supreme Court [and] they challenged it. We had six errors of law in our decision and one of them was that we should look at the value of the pipeline. And if you look at the Code it says that the regulated value of the pipeline - this is going back in time for me now - lies between; should normally lie between; the DORC and the DAC - the depreciated optimised regulatory cost and the depreciated actual cost - lie somewhere between those two. I think I've got the names right. I hope I have. 'Normally' is the key word you know so, therefore, you can extend beyond this zone.

I had actually taken it to the full value of the [DAC] - the highest of

the two - and I'd fixed it at that level. And that seemed appropriate at the time which was more than I think they really would have worked on many years back because they had higher interest rates. But that's all in the decision as I said.

Now that value that was set by me at \$1.2 billion was clearly not enough to recover their \$2.4 billion. And if you look at all the history of all the pipelines, as I did at the time, very few were equal to the cost. It was, one was a commercial decision the other one's a regulatory decision. But the two have to come together nobody denies that.

Ayre Yes

Michael Now I recognised that there was a problem there and, you know, whatever the case and I turned round and spoke with all the suppliers individually and indicated to them that this is a difficult one to resolve. And this - I think we probably would have recorded it - and I said 'I can't do anything but I'm just letting you know that there may be opportunities for a better commercial decision than the regulatory decision. One that I can't interfere with but I can certainly encourage you to look at it.'

So I met with everyone and gave them the same story because I was being challenged. And Epic Energy were quite concerned as you can expect. So we went to that I went and sought more information from everybody. I held public meetings to discuss it [and] to present the result. I presented it at a public meeting, you know, which was announced so everything was done very openly and it was all consistent with the Code and except we had to respect, and I said I would, the decision of the Supreme Court which was to look at the aspects.

The one thing it taught me is the way we had written the report was very much a typical technical report, you know. The decision was typical. I mean the decision was typical of a technical report. I studied with great interest the Supreme Court format and other

judicial formats and it was actually a lot, lot better [and] more readable. It carried the arguments through. It was sequential. You could have headings but all paragraphs were numbered. All these sort of little things and everything, the meat of the stuff was in attachments.

Ayre Yes

Michael And we had that too but we mixed the two a bit. So instead of having engineers or economists write it and checked by lawyers I switched it around and had lawyers write it and engineers and economists check. So we were able to review it. And that's the way the final decision went forward.

And I also had included in that final decision the original parameters that were used to come up with \$2.4 billion dollars and they were in there as well. And you'll see in there that the - particularly the interest rate - the average cost of capital was quite different. And I'm saying this because it's all fairly open in that respect. When the challenge was made one thing I did find as regulator on your own, you're very much on your own, and I found myself having to do things that were, you know, that were creating a lot of controversy around and I was getting much criticism from the paper a lot.

I was challenged by the Australian. I got the lawyers to speak to them and I got an apology recorded. I was challenged by someone else a well known author at the time who says it will go to the High Court it never did and he says he even wrote almost a backhanded type apology which said 'well if I've got it wrong well so be it' you know. 'I didn't mean to do it that way this is what I meant.' Anyway I didn't choose to take it any further than that and I don't think there was anything much to be gained.

The Code was pretty prescriptive and but you could move between the [two limits but] general tendency was stay between these two limits of DORC and DAC.

Ayre Yes.

Michael And so I wanted [that] and that's the advice I had and that's the way I worked at the time. When I was on my own and starting to try and find a way through it and I spoke to people directly I went and saw key people and asked them. And interestingly there wasn't anything set in stone at the time. But I felt there was enough information for me to look re-look at the values. So I came up and thought that a fair value would be around \$1.5 billion which is [about] 25% more which was going outside the range and that's set at a precedent now I think.

. I think there was one other case where it was outside but that was agreed before all this other happened. So this, and I said and using the words should [mean] normally I can go outside whereas my advice was that I had to stay between them. And I went outside and I made it 1.5 and, you know, or thereabouts I didn't say it was specifically calculated it wasn't. It was, and it's all thereabouts and I had my reasons for doing that. And that translated to about a \$1 tariff which we then came in to the final decision and applied [a] \$1 tariff between Dampier and Port Hedland, Dampier and Perth and to Bunbury it stayed the same. I didn't change it. I left it at that so that created another concern.

But there was no indication that it should vary in that respect as I thought at the time and that became it. They didn't challenge it. The pipeline which cost \$2.4 billion plus \$100 million extension [was] \$2.5 billion and they said at the time that it was - what's the word they said at the time that \$2.5 billion was the total and they said at the time that they paid too much. That was a general comment around Perth. I never used that expression until now. In the report it talks about them not making a sound commercial decision.

And I've said that openly and the result was that a consortium [was established] and I always argued that this is going to have to be resolved on a commercial basis not on a regulatory basis. I felt that from the beginning because it was clearly done on that basis and

clearly had to be pursued. And of course everybody wanted to retain their own tariffs because they were competitive for them.

Subsequently they did change it [and] the main users came to some agreement as far as I'm aware and they bought the pipeline for \$1.8 billion which happened to be the amount owing at the time, or thereabouts. I think that was well known too so the pipeline was sold.

Great loss to Epic Energy and that's not the best result to happen but it did

Ayre Mmm.

Michael And that's when the Economic Regulation Authority then came in to being. I was involved in setting a working group up to work out the transition and I was made the alternate chairman initially or acting alternate chairman I can't remember until they appointed Lyndon Rowe who took over the role and I stayed on until I went as Governor, as a member of the governing body.

And I had a lot of time for the way that Lyndon has picked it up and worked with it and it's given a system I think which is, you know, respects what's there but also brings a lot of expertise around the table particularly through Lyndon. And I think it goes forward.

I've got a lot of respect for them and it was great working with them. Had we gone for the higher values then we would have ended up with quite large, quite large, amounts of money that were, you know, would have meant higher transport costs. I think you're probably looking - because [at] the next round - people if you set a higher value even though they might have accepted a lower tariff the next round would inevitably be a basis of 'well this is the value what do you use? 'And you can't write that in to anything. [It] would be unfair to do for anybody in the future and but you needed to consider that aspect that you're giving somebody an uncertain position for the future and I think that would be entirely wrong. I also acted as Rail

Access Regulator at the time and currently.

Ayre Rail Access?

Michael They never filled the position because they knew the Economic Regulation [Authority was under consideration]. And I did that.

And it's interesting because it was a negotiate [and] arbitrate model it was not a National Code like the other one. It was based on the West Australian model and a chap called Bruce who acted as executive officer in effect also was involved in its development and knew it inside out and took an approach that would allow the parties to negotiate and then having negotiated if there were any queries then it would be up to the regulator to act as a referee, if you like, and to regulate it and it finally approved the access arrangement.

And also on the gas one we had a number of other access arrangements that came through and I recall one between two bodies that [because] there was only one owner and one user and I said 'if you can come up with something that you can live with I'll defer the access arrangements' because you could do that for up to two years. Anyway they didn't so I advertised for [input and] I suggested they prepare an access arrangement and that we would put that to the community or the industry and then we'd take it from there in the usual process. Well that did enough. That was enough to for them to get to agreement. Got two letters.

Ayre Tipped them over the edge did it?

Michael I think the important thing is, you know, it was an opportunity they felt they had but once they looked at it sometimes commercial decisions like this make a lot of sense. That's why I like the 'negotiate [and] arbitrate' model. It was an agreement basis and you had a regulator who was able to come in and make the changes if they were needed to be rather than it was by exception rather than by rule. And there's a lot to be said about a system that works on that basis.

Ayre Yes. There is isn't there?

Michael Yes. So now whether that could have happened with the gas I don't know. I'm not close enough to it [or an] economist to make that judgement but I can say that of the two systems, you know, the one - and perhaps it wasn't as big you know a scale as the others - but the rail one allowed at least the companies to talk.

And perhaps there weren't as many users as there were of course in respect of the gas pipelines so you know 'horses for courses' and maybe they are the appropriate to the right sorts of things to do for both of them. Others more experienced than me would have had that judgement at the time but from a regulators point of view I had no choice.

Ayre Just on a historical point when was it the original gas pipeline was commissioned? Was it the late seventies?

Michael I think it was. I have a feeling it was 1968 or so.

Ayre As early as that?

Michael Seems to be in my mind I don't know in this why am I thinking that ? No I'm probably getting mixed up with '98.

Ayre Yeah I have a memory that the State Electricity Commission became the State Energy Commission when the pipeline was created.

Michael You might be right. Yeah well it probably was around that time but it was around for quite a while before.

Ayre But that was the Dongara one wasn't it?

Michael It was initially the Dongara one. Then they build the one the Dampier to [Perth] [and], you know, you've got to argue whether you think it should be sold as a separate pipeline.

Ayre Yes.

Michael I mean I always felt that public utilities like that like roads - unless they're very special purpose - particularly when there's only one and

you've got to look at risk factors associated with one pipeline.

Ayre Ooh indeed, yes.

Michael There was to me always some value in the government retaining [it].

Ayre Well it becomes a strategic issue?

Michael It becomes a strategic issue. So it's always been something in my mind that, you know, selling it was fine [but] it doesn't mean you don't have a regulation of it. That's fine. You can still regulate a government authority or an enterprise just as you do with Western Power and others. But if people say that means it's not independent I said 'yes that's true.' But given that, you know, that the government owns them, you know for example rail lines are owned by the government even though it was regulated they were leased to West whatever they were. I've forgotten what their name was now. But Westnet I think it was, or something like that. I think I might be getting mixed up with all the different names.

Ayre WestRail probably.

Michael Well WestRail was the old name there was another group that took it over but they leased them. They had to maintain them as well. There were certain - I think I'm going back quite a while now because I finished that role in - oh well when I say that I finished the role when it became the Economic Regulation Authority in 2004 and that was the first year of the new Economic Regulation Authority. Because at the end of the [year] or was it before then? Yes, that's right because at the end of the year - following year - I stayed on. [It] might have been half way through that year and I was then reappointed for another year plus and then I became Governor so then in the end Governor Designate in 2005 mid-year.

Ayre Yeah it's interesting isn't it because in your time and mine we have seen power systems and water systems move from being government owned strategic assets in many ways, and I'm talking nationally now, into more commercial operations aren't they?

Michael That's true absolutely. I think I said terajoules before and I should have said gigajoules I'm pretty sure.

Ayre I reckon terajoules was probably right anyway.

Michael Will you check it for me?

Ayre I will.

Michael Not that it means very much to me anymore.

Ayre Okay well probably we can have a brief stop there

Michael Okay.

06/00 Ayre Now Ken I'd like to touch on your involvement with the West Australian Museum. Could you tell me a little about that please?

Michael Yes, certainly, thanks Doug. This was a role that [happened] - a lot of things happened after I retired from Main Roads I think. It happens to everybody and I notice my colleagues who are retiring today are suddenly finding themselves with all sorts of tasks. And it's a good thing because people at that retiring age and at that time I was 59 and people at that retiring age are looking to do something. I used to have a wonderful [book], not wonderful but I used to think it was wonderful, by Charles Handy who wrote what was it The Empty Raincoat.

Ayre Yes.

Michael And he said, somewhere, he said that there are three ages in your life. There's the age of learning, there's the age of working, and there's the age of living. I remember at my retirement from Main Roads I got up and used that phrase and said - this was in August '97 I said the age of living is about choosing what you want to do and living whatever you wanted to do. I was suddenly moving in to that phase and I was looking forward to it. And being made Chairman of the Museum, as an engineer who would probably be seen as not very much on the cultural side. But it would be wrong because engineers are much broader than people give them credit for.

Ayre How could I disagree with that?

Michael Well you can't. I've said it before, the narrow view that people have of engineers is so wrong and I think it's changing and I think the new course-work that's happening is going to change that as well. That's why I'm so delighted about it. And you can't go too far wrong using the principles and logic that you learn in engineering in anything you do and I've applied them throughout my life or throughout my professional life with a lot of in my view success but others may view it differently.

So when I was given this chance I said that would be something I'd really enjoy because I really enjoy the museum. And it was '97 and I held the position until I became Governor so I held it for a good seven years nearly eight years. It was nearly eight years. And I was very keen also to look to the future as other Chairs had done before me to a new museum then. And the debate was on yet again and it was going on and on and the argument against was the cost, and the arguments against that we haven't got a plan and we don't need a business plan. So I was able to dig up papers which showed it had gone forward before.

Anyway we redid it and eventually I'd have to say that I was keen on the East Perth Power Station and to some, you know, I'm not saying don't to move away from the Perth but you could use the East Perth Power Station to advantage. I also was involved in the East Perth Redevelopment Authority as Chair and I have to say they had carriage of that responsibility so I had to be a little careful in any conflicts even though they were both government. So I withdrew from [a meeting] whenever it involved discussion of commitments from East Perth Redevelopment Authority I withdrew. But I stayed with the other one in guiding that so I was able to represent but again made it clear at every meeting my involvement in both bodies.

It could be seen as a positive but also could be seen as using one against the other which I didn't do and I wouldn't do. But I was able

to help some of the thinking on the infrastructure side of it and money was put in to the Power Station to fix it - not to fix it to stabilise it was the word - because it was really in a bad way.

Ayre Yes.

Michael And it really they did some great work on it but nothing happened on it. It was effectively approved to go there by the Labour Government but that was withdrawn when the Liberal Government came in and of course they're moving on to their own site and I was involved with the - one of the interesting experiences I had as Chair of the Museum was the old building in Francis Street which was riddled with asbestos. It had limpet asbestos which you could watch it falling off the beam. It was steel framed and the asbestos spray on the steel work was starting to fall off .

Ayre So that had been put on what as resistance in the event of a fire in the building?

Michael Yes, that's correct. That was part of [it] - that's as I understand it. Anyway we knew about it and it was checked out and because it was a bit serious we had .introduced a precautionary policy which was [that] if there was any disturbance of the asbestos the place was evacuated and entry not allowed until it was cleared. And we also did regular checks whether asbestos fibres were in the air so we had good controls over it. I got very concerned for two reasons. One the staff knew but the public didn't. Okay. That to me [was a problem]. We [were] asking the public come in to a building they weren't aware of. So I felt that we had to put up a sign that there was asbestos there or close it.

The other thing that I was concerned about [was] in the basement of that building were all the collections and they were in layers soand if any asbestos got on to those clearing them would take forever as you can imagine. And rightly so, because it would be [a] need to worry about any asbestos fibres anywhere. The minister at the time Sheila McHale accepted that we needed to do something and we

closed the building to the public. And what we actually did we bought some space and - and the staff we had to move - and we purchased, or the Ministry of Culture and the Arts purchased, a building out at Welshpool. It was actually a leisure centre where they made tables leisure – tables, you know, ping pong and all that.

Ayre Yes.

Michael And there was a big warehouse and some offices. The offices became the offices of the museum for the time being always intending to move them back when they found it. The warehouse was converted in to a proper establishment for storage and also with humidity control and temperature control. All the collection was removed - every item. Going down and watching that - watching the Curators was like watching somebody on a treasure hunt. 'Ooh I knew we had one of these' was one of the comments and you picked up the ones - samples that were in formaldehyde and you'd find that the bottles - the liquid had dropped and the tops were rusted. They were cleaned, new tops, filled up, registered best data base you could have everything recorded. There was an adze, an axe. I think it's called an adze from the Bounty ship down there.

Ayre Yes.

Michael There were all sorts of specimens of butterflies and all being kept. They knew they were there. Let's just say everybody knew they were there but asking them to have found them I guess would have been quite a task because they were in layers. So they were all taken out because there's lots - we're talking three to four millions not necessarily there but three to four million dollars of objects in the archives. And they're spread around other places around, you know, where there's other museums and other things.

But this lot I don't know how many were there. [They] were huge. And they were taken out they were cleaned up taken out to that [new facility] and put in place and registered and on display if you want them. I remember going to the Te Papa Museum in New Zealand -

fantastic museum worth a visit - and it opened up my eyes because what it did it had a back of house [area] so you could go and visit the Curators in action. Sure it was selective. I had this in mind for Welshpool [but] I don't know if ever happened. And the other thing it did it was open spaces, you know. You walked in and you walk up and you're looking at sharks [and] we were in an ocean weren't we? We were walking underneath it. And it was just absolutely brilliant.

And I also I found Melbourne Museum pretty good in that respect too, being able to experience different spaces Aboriginal and others. I found these thoughts and ideas and came back and we talked about it and we said we need big spaces. I'm not going to say I'm sure the new one on that site [that] would happen but the end result of all that was that the building was closed. It's now been knocked down and the site cleared so all that was cleared off. You had to get rid of the asbestos whether you knocked it down or not. So that was a task that had to happen.

So I feel that doing that was a plus. People weren't happy necessarily about moving out because, you know, they wanted to be close to their exhibits and so on.

Ayre Of course.

Michael You can understand that and but, you know, I went and briefed everybody. I indicated to them that the basis was that we would find a new place and I said that was where one was being looked at. Anyway irrespective we need [to act]. You know [we've been] putting off museums - I've watched it done for 20 years now and well not [just] on the history that I've seen of others who've done it before me as well. So that was '97 that we started to pursue that again and here we are 16 years later and we're still talking about a business plan for a museum.

Ayre Well it'll probably be 2017 before we get a [new museum].

Michael Before it comes. Well I think it's got to go ahead. I'm a believer

once a decision is made you can have your views but let's get on with it.

Ayre I agree.

Michael And make it work. Because just watching my grand kids go there on Saturday which I took them to in the old museum, you know, the Discovery Centre and the people the [come] to dinosaurs. They had a ball.

Ayre Mmm, of course they do.

Michael They had an absolute ball.

Ayre I digress a little but I was trained by the Museum of Childhood under Dr Brian Shepherd, did a Certificate in Museum Studies and spent a lot of time with the WA Museum in the back room you know. Fascinating.

Michael Well it's interesting because I knew we were keen to make sure that didn't [close] that it stayed [open].

Ayre Yes indeed.

Michael You know, well I think at one time it was being considered as part of WA Museum.

Ayre We fought hard to make sure the WA Museum received that collection.

Michael I remember that story that was when I was there. That was very much part of that story of wanting to keep [it]. There was a very, very passionate view. The other interesting story is the talks I had with Scitech, What I had in mind was - and it was said at the time so it's not new - but I went and spoke to them with the idea of moving in to the Power House and the Power Station whatever. The reason is that, as I argued at the time and I still would argue, Scitech is very much for teenagers you know. It's for the young to about 15. High school kids, you know, because that's their/the area. The museum at the moment is very much geared certainly to the young people and

certainly to the older people who are [interested] you know. I don't mean just myself, I'm one of those, but sort of the later generation. The 15 to 25 year old gap there's no special catering for them in these places. So you get this gap and I thought if we brought Scitech and the museum - not absorbed within [each other as] they should keep their independence because they had different purposes - but working collaboratively in one place. You'll teach science - getting back to my passion to teach science.

Ayre Yes

Michael I'm an engineer but I know that it won't work unless we have the fundamentals that science gives us, the knowledge that science gives us. So you've got to have the tools and science helps you to develop those. So I'm consistent in my thinking I guess when I work through it all.

Then we went on and I was involved with the Board for many years and enjoyed it immensely worked with the Foundation which was a fund raising group. Had the Friends of Museum. Did exhibitions. When we moved the building we had two exhibits in the old building that were one was the whale which was been there [a long time] which is boxed up now but hopefully will be reinstated somewhere.

And the other one was the Stolen Generation type exhibit, or the Aboriginal Exhibition, and that was put in to the new building in the Hellenic Hall I think it's called And it's good I like it because it's taller and the spears instead of having them lying horizontally they're suddenly vertical and it gives a much better impression as far as size to people. But the beautiful thing about it and it was designed by the Aboriginal Advisory Group for the Stolen Generation section you make a special entry. [There's] this little seat there and you go in to one door and there's another door ahead of you but you can sit down. Then you go in. And it allows for people to, you know, if they become emotional or require some thinking space they can just sit there and reflect and it's beautifully and sensitively done. I give

credit to the wonderful Aboriginal Advisory Group that helps.

The history side has received a lot of attention in the past. The science I always felt needed a bit more of a lift and that was able to [occur. That did happen but I think the two have come together well I think they're doing a fantastic job. Alec Cole the new Director is just a top person and he's going to make that new - I've got every confidence he's going to make that new - museum work fabulously well.

Ayre Oh I'm sure you're right. Alright.

Michael The East Perth Redevelopment.

Ayre Yes let's move on to that because you mentioned it earlier. What was your role there?

Michael East Perth Redevelopment Authority was established in 1992 and as Commissioner of Main Roads the Minister at the time Pam Beggs, appointed me on the Board. So I was a board member from then and we were faced with transforming East Perth.

Now the important thing about that is that the original freeway, the Graham Farmer Freeway and the bridge which I was involved with in the early seventies the first crossing of the [river]. I was involved in fact I was Design Engineer Special Projects in charge of this project designing a bridge across the river through Burswood linking up to Aberdeen and Newcastle Street across Constitution Street virtually through the golf club golf course rather, and through, so you divided that all up. And it was the Labour Government that moved it to the north. And they moved it up to the north and hence alongside the railway bridge. And that opened up East Perth.

And where we had what we called Claisebrook Drain. A four foot wide drain going in to the river Michael Ratcliffe who was the CEO at the time of the Authority - the initial one, the inaugural one - he had this vision of putting all this together and this became Claisebrook Cove with development on both sides. On one side to

the north residential [and] to the south commercial. And all the different liveable experiences that you could have in respect of that.

It was all about creating a precinct, a community that was self contained in many respects. It mightn't have had schooling - but it had schooling nearby - but it [had] people living in the area [who] would be able to live and go to a restaurant and go and buy shopping, walk to the river, cycle you know. The idea of liveability was very much the order of the day as far as I was concerned. This was '92 and gradually it was developed and it was pretty well accepted by both parties - the whole development. And the beauty about is it was a precinct development as distinct from some of the developments I see today where they're done piecemeal.

This development looked at the whole area and came up with an overarching plan for the area both in respect of design policy and principles and design guidelines. So each building that went up had a template if you like. You had to just stay within it and you'll notice where they're all pitched rooves that's part of the intention that we always agreed and people once said 'oh, what will they become in the future?' Well if you make them all the same you can suffer some problems but each of them [are different]. You've got to give credit to the architects of today because what [they achieved] of that era and since they were able to use space so efficiently and so cleverly you ended up with the units that you have.

And while there might be you know three storeys which makes it awkward for people like me at this stage getting up and down - maybe not for that necessarily [for that] generation but people are putting in small lifts.

Ayre Are they really?

Michael Yeah little lifts that can go up in those buildings they take up space and my brother who lives in Subi in one of those similar area has put a lift in his house and you know it's expensive so you don't want to do that but it does cater for a different group. Certainly the young

professional type people and if you want to create family and have your families maybe it's not the best place because of space but there are parks nearby so but it depends on the individuals involved. So young couples, young business people and retirees I think all fit in very nicely. But whatever it is there's a choice.

Ayre So the East Perth Redevelopment Authority was that a sort of semi autonomous body?

Michael Oh yes very much it was and it had planning powers which meant that - local government sat on it two of the positions - but [it] didn't have to go to local government for approval. They were the approving body.

Ayre Hence the integrity of the whole project?

Michael That's right. And it was a planning body. It also sold off the land and everything. But I think that's pretty well where it really stopped. It purchased properties there because it needed them for future development, or to maintain the integrity of the area, or for heritage reasons. Initially it never used to cover it [and] covered only a specific area in East Perth [but] eventually extended to cover all the land on top of the tunnel and then went further and included doing the link. You know the railway link they're doing now to allow Northbridge to be connected to an extension of the railway line north so - well that way you'll open up - you'll be able to walk across to Northbridge which is interesting because that was that's my area where I grew up and we always talked about being able to walk from home in Lake Street between Newcastle Street and Aberdeen Street where I lived - we always talked about when we're able to walk across and go in to [Wellington] Street and [the city].

You know? So because we all, you know, people of those days were talking about these things so long ago just as they're talking [now] they were talking about the connection to the river. I mean we're all human and we all know, you know, things don't change as far as what expectations may happen but people do have thoughts and

people can appreciate which initiatives can make a better life.

Ayre Yes.

Michael So that became the area that including the top of the tunnel which then became part of the East Perth Redevelopment Authority and of course I was still Chairing all that. Not Chairing it, I'm sorry, I was still on the Board when all that was happening. When I retired in '97 I offered my [resignation]. Obviously I said I'll withdraw [because] I was there because I was Commissioner [of Main Roads]. But I wasn't there because of [being] Commissioner but because they wanted me to be on it. But the answer was that there was no requirement in the legislation for the Commissioner to be ex-officio and they asked me would I stay on. And I stayed on and the last four years Richard Lewis was Chair and he would have hopefully supported that. Eventually there were others. He was Chair then I think and then I took over [and] for about four years I was Chairman. Until again I was asked to come in [as] I say when I came in to the role of Governor I had many different positions.

Ayre So they didn't want you because you were Commissioner [of Main Roads] they wanted you because you were Ken Michael?

Michael Well that's what impression. I don't know [but] I was very touched by that because I offered to, no not I offered to, I didn't have an expectation of continuing because I thought they might be better off again thinking along these lines.

Ayre But doesn't it bring you back to integrity again you see?

Michael Yes.

Ayre And where you stand in the community you know?

Michael Well it's, I, you know I believe in doing the right thing. I also believe in respecting people and I also believe in trusting them. And those three words I'll always keep coming back to when I get in to trouble. When I say trouble [I mean] when I've got an issue to address then I

just go back to those principles that I have.

Rotary is one of the key ones that embellishes those as well as I sit there and I think you know now my mother always taught me this and Julie's mother was the same. Never do anything to tarnish your name. Your name is everything. That was number one lesson from my mum who was not an educated person in that sense. And Julie's mother who had perhaps a bit more education but lived with us for 23 years was saying the same thing.

Ayre I can contribute to that so strongly because I remember a few years ago being asked if I'd like to attend an ethics course and I declined. And when I was asked why I said 'well I learnt my ethics at my mother's knee.' And you do don't you?

Michael Well you know that is so true and people just carry on I must say with some of discussions [and] they lose sight of what they were really trying to achieve in the first place, which was respect your fellow man. Act with integrity and trust in those whom you believe in. Now if you get caught out on the trust mechanism, as I always say to people, then you've made a mistake. Well it doesn't mean you don't trust people it means you've got another point on the learning curve of life. So that's the way I put it.

Ayre Good

Michael So that was [it], so I then had to pass on and leave that position but the beautiful thing about it was it highlighted the role of liveability, precinct development, and development for the betterment of communities, but at the same time making sure they related to each element within it. So they did not stand out and just look as if they've been grossly misrepresented. And I believe in East Perth, and in Subiaco, in Midland, Armadale, and now the Metropolitan Redevelopment Authority as it's called which absorbs all the Redevelopment Authorities [and] is going forward in the same way. I think it's a grand idea - fully supportive.

Ayre Yes. One final point I'd seek your comment on with East Perth it struck me having seen the area in 1971 when I first came to Perth what a derelict waste-land much of it was quite badly polluted in some ways and really that land has been put to such good use.

Michael Oh and you know first the Power Station comes in again because when we first did the first stage and we were cleaning out all the tar.

Ayre That was from the gas works wasn't it?

Michael The gas works.

Ayre Yes?

Michael Gas works.

Ayre Well it was adjacent to Power Station wasn't it?

Michael Yes, you're quite right and when we were pulling out all the tar of course we had to get rid of it. Nobody would take it. We eventually worked out a mechanism to treat it and that was all cleared and it was [done] by testing and everything else and the result is there to be seen the cleanliness and so on

Ayre Well, the improvement in the river and this sort of thing.

Michael Well if you have a look at I remember when they broke the bar to come in to the Cove - great day - I remember when it all happened and Paul Keating was there as well. So it was bilateral type support and having done that - and they created two parklands there as you know and one of them they still monitor - I think they still monitor the water just to make sure nothing's getting in to the river. If there's anything there so, you know, we've got some pretty good controls in what we do and the result is what you see. I think it's one of my special spots in Perth going down to that area and just walking around.

Ayre Yes I've done a fair bit of oral history work for Trinity College and I've walked along from their site along the river bank a few times it's beautiful.

Michael Oh yes. It's beautiful through there and now the other development that's taking place which is Riverside Development which was also planned when I was there - not that, you know - I'm saying that's one of the areas, one the precincts that was being looked at. Again consistent principles within a designed set [and] not creating an overview plan and then changing the rules from property to property which is what you can get sometimes. I've told South Perth the same thing, you know, you need consistency in development so that you can get a pattern. You don't want it to be replicated from one to the other because you want uniqueness but you also want compatibility. So how do you get that? You do that by thinking through the initial planning and the guidelines that you want to apply and not waiting on the occasion [and saying] 'oh we'll do that this time'.

So I think East Perth and all the Redevelopment Authorities are good examples of doing that and I'm pretty sure the MRA as it's called will do a good job doing this as well.

Ayre Okay, well that's probably a good place to stop.

Michael I think so yes.

07/00 Ayre My name is Doug Ayre and the date is the 22nd of May 2013 and I am continuing with the interview of Dr Ken Michael.

Ken can we continue by talking about your time as Governor of Western Australia and firstly if I dare can I ask you how you came to be invited to be Governor?

Michael Well that's an interesting question that you ask. With great surprise I guess is the first thing I should say. As I've said on many occasions to people when they've asked what the process was I said well there isn't a process as such and that's something that I've commented on elsewhere as well and it probably needs to be looked at. But at the current time the matter rests with the Premier at the time and the Premier no doubt would consult with others. I can't say if that took place or with whom because I'm not aware. But the Premier

approaches the individual that the Premier would like to work with as Governor and once that's agreed there's a formal process that goes to the Queen for her approval. And once that is achieved then an announcement can be made but nothing can be said until that time so it's highly confidential. You're sitting in the very room where it took place. This is our lounge and dining room and the Premier at the time was Geoff Gallop and Julie always remembers this time because it happened to be the if I recall the fifth 5th of the 5th '05 at 5 o'clock. She always says that because it's just a nice repetition of the number five and of course we now put that down as it would be about eight years ago just almost.

Ayre Indeed.

Michael Indeed eight years ago. I got a call from the Premier asking me to – saying] that he wished to discuss something with me so I then said 'well' when would you like me to come in to your office, and I'll [be] happy to come and talk to you?' . [I make] a point that I was involved with Regulation at the time and I thought well perhaps it's to do with that because there had been certainly some interesting moments during that phase of my time as a Regulator. I was then on the Economic Regulation Authority Board as such and I thought he might be wanting to talk about some aspects - that or any other matter. It never dawned on me that it would be to be invited to be Governor.

On that very day Julie and I were talking about its time I, you know, retired and moved on. And, of course, I was running a consultancy at the time as well and I was very, very committed to that and enjoyed it. So I said 'oh, we could tone down some of the things' and then suddenly I had the Premier sitting just here nearby - on the couch nearby - and [he] said 'I have a favour to ask, or something to ask of you, rather than a favour. I would like you to be Governor of the state.' I just stared in disbelief I said 'this is amazing.' I said I even questioned are you sure and because it just came - it just wasn't even

on the agenda. It just wasn't even thought of. The last thing I would have thought of. But very honoured to be considered in that capacity.

Julie wasn't here at the time and she then came down - was called down - and asked for her view. I've never seen her, you know, stunned as well. So we were [stunned and] just sat there in amazement but feeling very, very honoured to be even considered. So I agreed with it and process went in place and on the long weekend now called the WA Day Weekend in June he made the announcement.

But I couldn't take up the role until January the following year because I had quite a number of commitments that I was running and I felt I should bring those to a conclusion. The former Governor at the time, or the Governor at the time, John Sanderson was due to finish in October of that year I think it was. So there was a few months where there was a deputy - well the deputy of the Governor became effectively the administrator of the state. And so I think after that I took up the role in January 2006 just before Australia Day and spent from then until May 2011 in the role and felt very privileged at all times, and continued to feel so, but importantly very honoured to have had the opportunity to represent the people of the state. That really is where we were coming from.

The people were very dear to us and representing them in any way we could in that capacity. That could vary in a number of ways [so] we sought to do as best we could. And I'd have to say that we approached it as a team as we have always done, Julie and I and that's the way I wanted it to be seen and but I didn't have to work hard at it because it was fairly natural for the two of us.

Julie's always been very supportive of everything I've ever done and even more so in this particular role which had greater commitments than probably I was able to act on in previous times. So I, you know, [did it] but we had great support, [a] great location of course, but great staff who gave us all the directions and advice that we needed to

do the job as best we could.

Ayre Yes. So having agreed to take on the role and I've no doubt in the interim giving it a lot of thought what were your objectives in taking it on then?

Michael Well one of [the factors] - well it was the people. I, you know, felt that I knew the role of Governor. I came from a government [and] a public service background so I knew very much the parts of the role, the formal bits that were done and that's the constitutional bits that require the signature of the Governor, you know, the regulations, the appointments, the Acts of Parliament, and it goes on [with] the swearing in of various [officials such as] the judiciary and others where required. That certainly was the constitutional side.

We also had the ceremonial side which is well known and where you participate in openings and other events that might be of a symbolic nature or one that you've been asked to, you know, open on behalf of the community and other events that would have a ceremonial tag. You're also given the opportunity to promote the state and when you meet with dignitaries - and there were many visits by dignitaries at all levels that were able to come - and then you had the opportunity to promote and expand on what the state does, and [I] never missed an opportunity to do that of course.

We had many Ambassadors call in from around. From Canberra in particular and other visitors that may have come in from time to time. When we had the chance to go away internationally - and we went away on two occasions in the five years - we had the opportunity then to again use that to promote the very work that we do, what Western Australia is, about its economy, its people, its values, opportunities, what it represents you know, and I had that in both formal and informal sorts of occasions.

And the final one which I probably had a lot of emphasis on was the community role and that is, you know, how do you interact with the community? How do you get feedback from the community? How

you can be better informed by the community? So that when you are sitting at the Executive Council level making the decisions that need to be taken by way of government, you know, how can that help you in understanding what you've got before you and what you might raise.

It's clear that you act on the advice of the Ministers, Premier, and the Ministers in acting on Executive Council however the Governor has always retained the right - by certainly almost by convention I guess - the right to be consulted, the right to encourage, and the right to warn. And that's been well established over time, and it's recorded in the various papers, and I never lost sight of that fact that we could do those things.

So I took those very meaningfully and applied them where I thought there was a need. And while you might act on the advice of the Ministers at Executive Council and that is a convention as well, and obviously it's the business of government, and you have to respect that it has been through the Parliament in some instances, but in other instances it may be the Cabinet making the decision of an appointment for example and you have a right to ask questions. You have a right to defer but if you need to question anything at the end of the day you act on the advice but I don't remember any instance when I wasn't given the opportunity to comment, the opportunity to have that followed up and referred back to me with any queries and that I may have had. Often their clarification. And I found that on all counts at the staff level and at Parliamentary and Ministerial level [and] Premier's level I found I had the respect that came with the position to consider those points whenever I did raise anything.

And I did have a way of managing it myself. I used to meet with the Clerk of Executive Council before the meeting and just go through the agenda so that I was clear on everything. I used to read the papers [and] if I had any queries I would let them know beforehand so that they could be addressed before the meeting rather than delay

any actions.

Ayre Yes.

Michael And not that you'd expect them to be delayed. People think the positions are rubber stamped [but] it isn't. While you might agree and go ahead with the recommendations made, the opportunity is always there for debate and questioning, and I had that opportunity on every occasion without question so I felt that constitutional role was very, very well respected.

But it gets back to the community role that I was mentioning. Getting around the community including the remote communities. We went right out to a number of remote communities and we just get a better understanding of what the situation is and we can bring that back with us. And, in both cases, because Julie often, you know, would have been with me for most of the times and if I saw anything, or if I queried anything along the way, or I felt there was a concern raised with me and I thought it had merit I would pursue that through the particular groups through often the Official Secretary who was Kevin Skipworth at the time. And Kevin would follow up with the staff or with the Minister's office and I'd make these positions and points known. My belief in working in this way was to go to the source rather than making comments which are, you know, sort of very vocal in any way. I didn't see any value in that and I operated like that when I was a public servant. Whenever I had an issue I went straight to the Minister. That's my role and I found almost without exception most of the issues can be resolved at that level.

Whether there's an improvement is a value judgement but you have to realise that often the points that are raised generally don't have all the information related to them and they need to be considered. However they do highlight an issue and I think its worthy - if I felt it was worthy to be addressed - then I took it forward so that was where I had the chance.

The other thing about community and the over-arching theme you

mentioned [being] what did we have in mind? If I had one overarching theme it was 'adding value to community'. Everything in every year [was] set out I looked ahead with Julie and worked out where we should go, what we should do, what areas we should cover, what requests we've had - and we got many - and we tried to honour as many as we could. I had a rule that if there happened to be conflicts in timing on events we honoured the first one we had accepted and we always did that. And while people say 'oh, I don't want to sit down in judgement over the value of one group versus another' in my book it we had agreed to support it then that would remain. I said 'it's not about the size of the event it's about the value of the event and if we've put a value on that then we honour it.'

And we did that throughout that period without exception. The only time that might have been affected - and I can't even think of an occasion - but it could have been is when you had a personal issue probably related to family that you might have to [deal with. And I had a few of those where I still kept going but Julie, due to health reasons, wasn't able to often. Not often, but on occasion, not undertake it. But that wasn't that well known either because [she] attended 99% of them I think. She did so well.

Ayre Mmm.

Michael So adding value to community was one. The other theme that I had - and I picked it up during my travels - was one of, I don't know if I've mentioned this in the earlier interview, was one of science. When I went to one of the schools it was clear that this young teacher was - I think I did mention it - this young teacher was carrying out a science class of all mixed years and I was querying why and she just felt that more should be done for science. And I said to myself here am I in this position probably not doing as much as I could other than supporting the different groups but nothing in a proactive sense if you like on science. And here's this young teacher passionate about the need for it to be done. So I took that as a lesson to me [and] came

away and established the Science Forums, [that] I called The Governor's Science Forums, and the first one was on climate change and they were all linked to sustainability in some form. Climate change then I think we did renewable energy, marine science, recycled water - very topical now and we had a great talk by the Water Corp Sue Murphy is the CEO there - and then the final one I did was in my I think it was in 2010 if I remember was called Youth Science and Sustainability. We invited the Years 10, 11 and 12 from schools - we also brought them in from the regions with the support of UWA, Rio Tinto, and Water Corp, and I posed - and I wrote the questions I posed - and I was very passionate about these three questions. Very simple but hugely difficult in responding to. Simple in statement but requires quite a bit of thought in my view.

First one 'what are we doing right about our environment, what aren't we doing so well and what should we be doing? Pretty obvious questions but difficult.

Ayre Simple questions but complex answers?

Michael Complex answers. Very complex.

Ayre Yes.

Michael And I have to give full marks to the students all 150 of them and their teachers that were there. They were in separate areas and they could answer the questions too, 70 teachers or so. I then invited others - anybody who was interested could come and sit and listen and Lyn Beazley who was my secret weapon as I always called her, as a/the Chief Scientist, I asked her to be facilitator of all of them and I would work around her timing every time because she made such a difference and made them so successful. She facilitated the workshop and we even had an interactive key approach that somebody donated the whole facility so everybody could respond to series of questions before and after and they were recorded and we did a report which we sent to all the schools round the state. And we also sent them to the chief scientists in other [states] and to the other

Governors and the Governor General. I'm pretty sure we did that I'd have to check. But it certainly spread them around and went on the web site. Of course they all went on the web site. But that was a comprehensive report.

Recently interestingly I've been involved with the Engineers Australia sustainability group. David Rice has been running with that and he and I have been talking and I gave my support to what they're doing. I think they're doing a great job in bringing it all to the fore and I actually gave him a copy of that final report. I sent him a copy and the reason I did was that I felt he was talking about education and I said 'you should have a look at this because the biggest issue coming out of the discussions from the students telling everyone else, you know, all of us as a community that one of the biggest issues they've found in, you know, what is needed about the environment and understanding is education. Not education in the formal sense only in schools that was of course a given but very much about educating the community as a whole.

Ayre Yes.

Michael Simple but difficult. More communication - more you know - and I think it supports the very thing that Engineers Australia is trying to do in respect of that. So I sent that to him because I thought it was a good idea.

So they were the messages. We went out to remote communities, you know. I went to places the East Pilbara, went to Warburton, went to Kalumburu and went to One Arm Point and so on. And so we got right out there and visited the various communities and, you know, generally found that there was always a message that I was able to bring back either to help both of us and the Government House in general to reflect on, you know, how we should go forward in certain areas, how we should plan each year try to work out each year, what we should do.

I had a big map of Western Australia I wanted, you know, with pins

physically stuck in and made the [plan] - you know it was a strategy. I started from the outside and worked our way in. So went as far out as we could first so Kimberley was probably one of the first visits and that's the West Kimberley and we went right up there and tracked it all through. We also did the East Kimberley and so on the Pilbara we did all the regions. And each year I'd have a look at where the gaps were. Where the pins were missing. And that became the focus for a visit.

Ayre Yes.

Michael We would approach the Regional Development Commissions as they were known and ask them to help us put a program together for that area. [We] had particular elements within that so adding to the value to the community as the over-arching [issue which] had a series of elements each time [that] I wanted to focus on.

Education was always at the top of the list. I always had in mind doing things that support the community any community events they may have. Health was the other one where we sought to visit the hospitals and wanted to bring community groups together through the Council and some other form so we could just be with them.

One of the messages we got early in our piece which I found of great value was that in the Kalgoorlie Miner they did an [article] - and I'm not sure if I mentioned this in an earlier interview but I'll repeat it now [as] it's relevant to this. I went there and spoke to the people at the Kalgoorlie Miner and went and visited their office only because they asked me to. I thoroughly enjoyed it and had a good chat and they came back in the paper they wrote this little leader it's the shortest leader I've had - I don't mind [as I] don't want one necessarily - but there was a little editorial in there and the heading was 'the Governor has a role'. The Governor has a role and they went on to say - and it was only a few paragraphs - in unifying communities. That brought home to me - and that was early in the piece - brought home to me the very great value in getting out there

and meeting with people because what it did do. All the different groups came together in an apolitical way, and irrespective of sort of party affiliation, or any other way, or any thoughts from a political point of view. The discussion was very much about what's good about the community, what can be done about the community, and what thoughts do they have [that] they like to convey.

It was always concentrated like that and wherever we went that was the focus and that message came out in another visit when I went to Carnarvon where similar comments were made. It really gave me a lot of heart because the role of Governor is often seen as a ceremonial rubber stamping position. I tried very hard to discount all that.

I put a lot of effort in to the constitutional side made sure I read all the papers and knew what I was doing very carefully. I had an obligation to the people of this state to make sure that I did that. That was a responsibility and I treated it very, very seriously and as much effort as I needed to put into it to get the satisfaction that I needed that I knew what I was signing correctly.

So I really did find that the community gave me that real support that kept me moving forward to do the job that I needed to do as Governor. It came very much from that community spirit that I was fortunate to enjoy with Julie.

Ayre Yes. So, in summary then, how did you find the experience over all?

Michael Very well, very honoured, very invigorating. I must say very busy as any Governor I'm no different to anyone else in that respect. The demands on the position can be fairly intense but they can also be well managed and getting good support is an essential element. I don't mean sitting there and giving you a bigger mouth piece for you [to use], I mean giving you all the necessary information and background that you need.

I never used to like to go anywhere unless I understood why I was there, [What] was the history of the group was about, what the

purpose of the group was about, what they'd achieved, what they would like to achieve, who were the people involved in it, what was their background, how did they feel about the various aspects of what we were doing? And having a good understanding before I went in. I would study up all that before I moved in and also I'd like to know the context of what they'd like to hear. I'm not saying they'd tell me what to say but I'd like to be relevant in what I say. I could carry on and say the various things that I would like to say and I would do that as well but there'll be some messages that are important to them and they might like to know my views on it.

I do that in all [I do] not just as Governor. When I'm doing things now, and when I did things before, I would ask who is the audience, what is this all about, what are the issues being raised, and what are the messages that this group is giving out to people? Now if I wasn't happy with any of that I wouldn't just say it but I'd prefer to decline if that was the case.

Ayre Yes. So did you find that the experience was worthwhile?

Michael Oh the experience was incredible. I couldn't think of anything else that will go down as, you know, just an incredible period of our lives - both of us. The honour given to us to do the task was in itself for us quite something and importantly representing the people of this state was hugely important for us and was not treated lightly at all. In fact to the extent that one of the things that both Julie and I very much liked about the role was making it accessible to the people and that is allowing the house to be opened - I think it was once a week - then twice a week. I made it three times a week generally. Mondays or Fridays are difficult for the logistics of the house and the management of the grounds.

Ayre This is Government House?

Michael Government House.

Ayre Yes.

Michael So we'd have Tuesday, Wednesday, Thursday and I believe it's still operating like that and between 12:00 and 2:00 people would come and have lunch in the gardens.

Ayre Really?

Michael Walk around it's been like that for a long time. But it's just we increased the frequency of it. We tried to do as many things inside the house. We tried to bring people to have open days which were traditional and they're continuing and it's good to see. In fact they've been expanded quite a bit which is even better. But I used to like people to come into the house so if we had an event I didn't try to limit it. With Julie too, you know, the senior people - we tried to bring in a cross section of the organisation who could feel what the house was like and what it represents and always offering a tour if they wanted one.

Ayre Yes

Michael But I had a simple premise. I guess it gets back to my earlier comments. I used to refer to it as the people's house and, therefore, most of my speeches if you read them would say that - the people's house - therefore people should have the right to [go] there and to see it and to enjoy it. And that we did and Julie improved the items within it so that it was very homely and we made - hopefully we made people feel comfortable. A great privilege. A great honour. Something that we almost find difficult to remember - that we can remember - that we were there but difficult to appreciate the fact that it did happen.

 You know because it's a couple of years now and we think about [it] as Julie puts all the photographs together which she's been doing. She's been making these albums of our time there. And of course our grandchildren were able to visit. It was a home to us on the weekends and so on and they used to have a ball.

 Probably the most - if I might just mention [it] - probably the biggest

impact we had was the farewell that we were given [by] firstly the Premier in Government House ballroom which was by him. Eric Ripper spoke and Dixie Marshall was the MC. They just did a fabulous job and Julie and I couldn't believe it and the thing that I loved most was that Julie was acknowledged even more so for her contribution. That happened at an event at Government House Foundation where she was really given virtually a standing ovation for the work that she had done and I was so proud of her.

But on the final day - we weren't aware of - we knew the military would be there just as a bit of Guard of Honour but it was more than that. There was a parade of the three services – 90 from the Navy or thereabouts, Navy and Army and the Air Force and they had a formal parade. A farewell to us and I still remain in awe over that particular event. To top it all off - and this really surprised us - there was a fly past. Well, you know, I think we were just taken aback.

So how did we feel? It's not a distant memory. It's something real in our lives. It's an honour that we'll never be able to forget, and a privilege that was given to us, and we just hope we were able to have done something of value to the community and to government in general.

Ayre Okay, thank you.

08/00 Ayre Ken I'd like to just continue with our discussion about your role as State Governor. How does the role relate to the role of the Governor General of Australia?

Michael Now that's a question, a good question. Each Governor is independent of the Governor General in its administration of the state. So we are a Federation, the Governor General is the Queen's representative for the Commonwealth of Australia. The Governor is responsible under its own constitution of each state. Each state has its constitution I should have said and the Governor is the appointed representative on behalf of the Queen. So the appointment of Governors of the states is done quite independently of the Governor

General or the Canberra office.

If the Premier of the day chooses to discuss it with them that's entirely their choice but there's no formal requirement and the Premier writes directly to the Queen [who] approves it. I've been given the formal appointment signed by the Queen, which I treasure as well, so that's been given to me. It was hanging up in Government House of course and they keep a copy but I now have my original one which gives me the Commission to be Governor.

But, of course, the hierarchy is clear if you're talking about Australia. The Governor General is the Queen's representative and represents Australia throughout the world. And the Governor General from the protocol position is clearly the senior member [in] respect of Australia. In respect of the state the Governor under the Constitution has his or her own role which reflects that of the state. In fact there isn't any way that they come together as well [as in a] formal way of Governors. Administrators in Northern Territory and of course the Australian Capital Territory are separate and I understand come through the Governor General in any case so they have a slightly different aspect in respect of the fact that they're not independent in that sense.

Ayre Yes. So you mentioned the Queen did you ever meet her personally?

Michael Yes. Well one thing that we are given, and every Governor I guess [with the] Governor General of course it goes without saying, has and the right to - not the right has got the opportunity - there's no rights [but] has the opportunity to meet the Queen at Buckingham Palace or in her own area of - I was going to say jurisdiction which she has across the whole lot - in her own area of in the UK. I say that because I know others have met her in Balmoral when she's [there and when [it happens at the] particular time of the year when she's away. But we were there in June and we went to Buckingham Palace. We drove through the gates and then Julie and I had a formal 20 minute visit with the Queen and just the three of us having a lovely chat. She's so

gracious it was a delight to be there. We were very honoured to be there. She is just an incredible person with such incredible knowledge and to be there for 60 years and to do so well over all that period of time is a fitting example of the person she is and of the way in which she conducts her role.

Ayre Yes indeed.

Michael It was a real privilege and honour to be with her. We had the chance to catch up with her again - I say that in a very loose sense I guess - when through CHOGM in 2011 when we were invited, Julie and I, were invited to have some drinks with her and about perhaps another 10 people, about a dozen of us in all. Just in Government House having a quiet little get together and I found that extremely friendly and most enjoyable. I think the other time we saw her was during the Commonwealth Games in Brisbane in 2006.

Sorry they weren't in Brisbane. I've got that wrong they were in Melbourne if I remember. I can remember John Landy being the Governor at the time so it would have been March 2006. I think we were certainly there and we enjoyed the moment that we had so it was really something.

Ayre Excellent.

Michael So the answer to that was [that we met] on several occasions not several few occasions [but] we've had the opportunity to meet the Queen and in every case she's been as gracious as you see her everywhere. And so we're very privileged.

Ayre Yes, she works extremely hard doesn't she?

Michael I think she [is] incredible.

Ayre Yes.

Michael Incredible.

Ayre Alright. In my capacity [as Curator] with the Scout Association I walk past your photograph on the wall in my Heritage Centre.

- Michael Do you really?
- Ayre Wearing your Scout uniform, and that makes me think that you would have been involved with many organisations and many community events. Are there any that come to mind?
- Michael Ooh there's so many. We had up to about 200 patronages between us. Julie had some I had [some]. Most of them were probably mine as Governor at the time. Jointly we had a number and Julie had quite a number as well but the majority were for the Governor himself or herself. It's just so hard to reflect on them. I think the ones that I used to get a kick out of, if you like, were the ones where people were recognised at all levels. Scout awards, Boys Brigade, Girls Brigade, where people were set aside and acknowledged for what they've done and their contribution and without exception impressed by their humble approach and equal amazement in being recognised I think.
- Ayre I'm sure you could relate to that?
- Michael Yes absolutely and it was just so touching. And of course the investitures of the Orders of Australia which is looking at the Order of Australia Association as well, was just something incredible. The Citizens of the Year - now the Western Australian of the Year [Celebrate WA], the Scouts as you mentioned, St John Ambulance recognising people who have made contributions, and all the other different types or organisations. The Churchill Fellowships. I'm just plucking them out of the air. Legacy. All these different community groups all added that extra dimension to us and it was like when I was Chancellor, before I became Governor, I used to say to people, you know, when I was asked about graduations I said I missed only one in, I think, in almost five years as Chancellor. Ten thousand graduates I shook hands with anyway. I had that worked out. I thought it was a good statistic. I said to them that everyone that came forward to me I saw as the first one. They were all number one in my book and just to watch that 10 seconds of glory of coming across, and to see the excitement in their face, and to hear just briefly what their

degree was, and to watch them smile and shake their hand and just have a quick word was probably one of, some of, the proudest times, as were all the other type awards.

So recognising people, recognising events that contribute to the good things that we do. The community commitment, the volunteering support people giving so much of themselves throughout the state. You know, visiting regional centres I'd have to say was a highlight for us because we got out to the communities and met with them very briefly in some times but got a lot of value out of it. We tried not to make them too brief. We tried to make the events time enough for us to mix and speak to the people so we got that view of what was happening and what could or could not be done.

So, I guess, the Governors act independently but once we come together as a Federation and call ourselves Australia then very much it's in the Governor General's role and we recognise that seniority in that sense. So although we don't report to the Governor General the seniority aspects are quite clear.

Ayre Yes.

Michael On two occasions I had the wonderful opportunity to be Administrator of the Commonwealth. It normally falls to the most senior in-service Governor and I wasn't [the senior] I was number two at the time but the one who was Marie Bashir from New South Wales - Governor of New South Wales - she was the most senior and so she used to stand in as Administrator but there were two occasions when she wasn't available, was away herself, and I had the chance to do it. And one of them was - the last one in fact - was when in 2010 was when I was over [for] Anzac Day and sat, I stood rather, with General Peter Cosgrove reviewing the parade and that has to be one of the proudest moments.

Ayre Yes indeed. Well that would be a unique event wouldn't it?

Michael Oh it was absolutely brilliant it was most humbling occasion and

proud occasion to be next to this giant of a man in many ways. To be able to stand next to him and review the parade. In fact the thing that I did ask before I finished as Governor was - my term was due to finish in January - but I was able to get a short extension to April so I could do Anzac Day here as my final event. That was before I knew about the Tri-Service farewell that we were given which was a surprise on the day. The reason I wanted it is that [it] was very special to me and because I admire and appreciate the sacrifices and courage of so many and that I just felt being there was just wonderful to share in those special moments that make Australia what it is.

Ayre Yes. Okay. Well I think we can wrap up there for today Ken if you're happy with that

Michael Yep I'm happy with that.

Ayre Thank you.